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ABSTRACT

This report covers the first year of a five-year study of 11 school districts that are involved in school improvement activities. The schools are attempting to create new programs that will increase the effectiveness of linking agents working with the schools in three curriculum areas: basic skills, career preparation, and citizen education. Chapter 1 contains a discussion of the general questions addressed by the research, the focus of the report, approaches to school improvement, and the research strategy. Chapter 2 presents case histories of the work of 3 of the 11 teams to indicate the nature of the planning activities in the schools. Chapter 3 examines the work of all 11 teams to identify factors that facilitated the planning process. Chapter 4 summarizes the findings and identifies questions for future research. (Author/LD)

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RATIONALITY AND COOPERATION IN EXTERNAL ASSISTANCE FOR SCHOOL IMPROVEMENT: A PRELIMINARY REPORT ON THE RBS EXPERIENCE

by

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ABSTRACT

A growing body of literature indicates that dissemination and change efforts based on the use of human "linking agents" are more effective than those that rely on packaged materials alone. However, a great deal needs to be learned about the materials and strategies that can make linking agents more effective. In the summer of 1978, Research for Better Schools (RBS), a regional educational laboratory funded by the National Institute of Education, began a program of work designed to develop approaches to school improvement that would increase the effectiveness of linking agents working with schools in three program areas: basic skills, career preparation, and citizenship education. The corporation (RBS) seeks to develop approaches that facilitate rational analysis of programs in the context of a cooperative relationship between school and change agent.

At the same time, the corporation's Field Studies unit initiated a five-year research project to examine linking agent-driven change processes and identify factors contributing to their success. This research is based on non-participant observation of eleven school improvement teams in thirteen schools that are cooperating with RBS by using its approaches to plan change efforts. This report contains initial analyses of the first year's field work and includes case histories of three teams as well as a cross-site analysis.

Because the school improvement team plans were not implemented during the first year of activity, two interim outcomes of planning efforts

were identified: the team's sense of ownership and an assessment of how well the teams went through the steps laid out in the RBS approaches--i.e., how quickly teams progressed, how well they understood the ideas presented, and how well they were able to use those ideas to address locally significant problems. These outcomes could have been affected by the approaches themselves, the relationship between RBS and the team, the behavior of the RBS linking agents, or school characteristics.

The approaches entailed adoption of what Butler and Paisley (1978) term a process-helping role. That is, the linking agent helps the school diagnose its problems and advocates a procedure for that diagnosis, but no attempt is made to sell a particular solution. Unlike better known process-helping approaches, such as organizational development, these focus on programmatic rather than social psychological issues. There were few differences among the approaches in terms of interim outcomes. Each approach was quite successful in one school, and each had some problems in others.

The thinking that led to an interest in a cooperative relationship was based on an analysis of intra-organizational relationships. However, the RBS linking agent entered into an inter-organizational relationship which was more analogous to a market relationship than one between superior and subordinate. Each party entered the relationship with a set of core concerns. If those concerns were not met, the existence of the relationship was in jeopardy. Hence, tension between the parties became very important. It was an indicator that one or both parties was dissatisfied and may have withdrawn. There was a strong negative relationship

between the existence of tension and achievement of interim outcomes among the teams. However, tension had positive consequences. When successfully resolved, it led to a stronger relationship based on mutual understanding.

The cross-site analysis did not identify any strong relationships between linking agent behavior and the interim outcomes. However, the case histories indicated that the linking agent played an important role in mediating between a component with its approach and a school. Depending on actions the linker took, the relationship was strengthened or weakened. Yet, in contrast to other linking agent studies, the RBS linkers had relatively little flexibility when working with schools.

Finally, the cross-site analysis revealed three contextual factors that contributed to the interim outcomes: central office support, the principal's problem-solving motivation, and teachers' problem-solving motivation. Problem-solving motivation referred to the participants' perception that their school needed to improve its program in the curriculum area relevant to the approach. Of the three factors, central office support and the teachers' motivation were most important. In addition, the case histories suggested a number of other important context factors, including the schools' standard operating procedures, the teams' ability to understand the approaches, and the existence of other change projects in the schools. Overall, aspects of the school context were the most important conditions affecting the relative success of the projects in the first year.

ACKNOWLEDGMENTS

This report has benefitted heavily from the assistance of numerous people in the field and in Research for Better Schools. The staff of RBS' Development Division were a major help in introducing us to the eleven sites, helping us develop rapport with school people, and in providing their insights and observations concerning what these change efforts were about. The Development Division field people most directly involved in this effort included Carolyn Friedman, Ron Houston, Lois Johnson, Jim Oswald, Susie Root, Michael Simeone, David Squires, Rita Tolbert, and Penny Traver. Directors of the components responsible for developing RBS' approaches were David Helms, Barbara Presseisen, and Michaelita Quinn and Stan Temkin. The principals, teachers, and central office administrators in the schools were also generous with their time and supportive of our efforts. They must, however, remain nameless.

The report has relied on the preliminary work of a number of people who are no longer a part of the Field Studies effort. These include Janet McGrail who assisted with initial planning, John Thomas and Stam Temkin who took part in the field work, and John Connolly who oversaw initial Field Studies activities. Linda Hughes helped with the early data coding and analysis. Egon Guba, Robert Herriott, and Ercell Watson provided useful input into our planning. Terry Deal and Karen Louis provided helpful reviews of the first draft of the report.

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H. D. C.

CHAPTER I

INTRODUCTION

What are the most effective ways external change agents can help schools improve their educational programs? What characteristics of schools affect the improvement process? How do schools and external agents work together? Do schools vary such that some approaches to change are more effective in some settings than others? Research for Better Schools (RBS), a regional educational laboratory funded by the National Institute of Education, is engaged in an extensive research and development effort to address these questions. The task of conducting research on change processes rests with RBS' Field Studies unit.

As a part of this research, Field Studies is studying schools in 11 districts involved in school improvement activities with RBS. The schools are working to create new programs in three curriculum areas: basic skills, career preparation, or citizen education. This report covers the first year of activity at the sites, and provides an opportunity to clarify issues identified during that year.

This chapter is an introduction to the school improvement study. It is divided into five sections: (1) a discussion of the general questions the research addressed, (2) the focus of the report, (3) the RBS approach to school improvement, (4) the research strategy, and (5) an overview of the remainder of the report.

Research Questions

A growing body of literature has demonstrated the difficulties inherent in approaches that intend to produce change from a distance. The Rand change agent study indicates that categorical aid grants are not reliably effective in promoting change. Districts often approach funding competitions opportunistically, in that they compete for the money and then drop innovative programs when support is terminated (Berman & McLaughlin, 1975). RBS' own experience indicates that the development of curriculum packages is rarely an effective way to promote change. This conclusion has been borne out by the evaluation of the Project Information Package Program which refuted the assertion that the adoption of autonomous packages of materials without direct technical assistance leads to modification of instructional practice (Stearns & Norwood, 1977). On the other hand, dissemination and change efforts based on the use of human "linking agents" do seem to promote effective school improvement (Emrick & Peterson, 1978; Louis & Sieber, 1979). Apparently linking agents are effective because they can help the school adapt the approaches or ideas imported from other locations to local conditions.

These studies suggest that local change benefits from interaction among school staff, an external linking agent, and approaches or ideas brought in from outside the school. However, these findings raise a number of questions about how these factors combine to facilitate school improvement. RBS is interested in identifying characteristics of linker-based change processes that facilitate school improvement. In particular,

it is examining two characteristics which have received considerable attention in the change literature: rational planning and cooperative relationships between external agents and schools. Since there is considerable debate about these characteristics, this project is asking both how useful they are and what factors contribute to them.

The essence of rational project development in schools is the formulation of technically correct or accurate decisions based on clear goals and adequate information (Firestone & Herriott, forthcoming). Hage and Aiken (1970, pp. 94-95) describe this aspect of the change process as follows:

> The beginning of the process of organizational change occurs when organizational decision makers determine that either the organization is not accomplishing its present goals as effectively or efficiently as possible or when decision makers alter or amend the goals of the organization... During the evaluation stage decision makers must assess the state of health of an organization, consider alternative ways of correcting organizational problems, and then decide on one alternative that hopefully will accomplish the desired ends.

There are in fact two parts to the rational design process. First, the school's health is determined by identifying discrepancies between goals and performance. Second, alternatives are sought that best reduce these discrepancies at the least cost. The first step requires the ability to collect relevant, accurate data about the school while the second requires command of the knowledge base relevant to these goals so that the most technically sound alternative can be selected and modified appropriately.

The product of rational planning is assumed to be a technically sound plan for improving a school. It is also assumed that, all other conditions being equal, the better the quality of the plan, the greater the probability that change will occur and become institutionalized.

However, there is some question about whether or not schools have the capacity to engage in rational planning. Corwin (1973) points out that reformers have regarded schools (and external assistance programs) as much more rational, potent instruments for the implementation of policy decisions than is in fact the case. Yet, the assumption of rationality seems to be well-established among policy makers. Consider New Jersey's program for providing a Thorough and Efficient Education to children (T&E). Schools and districts are required by this legislation to follow a six-step process which includes goal development, establishing objectives, needs identification, development and installation or programs, evaluation of program effectiveness, and budget review (Department of Education, State of New Jersey, 1976). The interest in needs assessment, evaluation, and management by objectives in schools attests to the prevalence of this assumption of rationality.

Practitioners do not necessarily ignore the non-rational parts of schools. Indeed, they often devote a great deal of time to the maintenance of interpersonal relations and negotiation of important matters in ways that do not fit with the assumption of rationality. However, Burns' (1961) comments about business seem to apply to schools. Aspects of organizations that do not seem retional are usually discussed "backstage"

and covertly. The guiding assumption seems to be that if schools are not totally rational, they are at least readily rationalizable.

There are two strands of thinking that create an interest in cooperative relationships. First, the history of curriculum development indicates that it is difficult to create change through curriculum revision. The most significant "finding" in this area is that curriculum packages that are externally developed do not find their way "behind classroom doors" (Goodlad and Klein, 1974). Commenting on twenty years of science curriculum development, Welch (1979, p. 301) concludes that "General Patton...described the situation accurately when he wrote, 'Weapons change but man who uses them changes not at all...' The curriculum development projects developed many new weapons, but very little change is noted in classrooms." The current assumption seems to be that teachers want to be active developers of the materials they use, or at least to have the opportunity to adapt those materials to local conditions. It is reasoned that including them in the planning and development work will increase the likelihood that the materials will be used.

Second, there is a long history of debate about whether or not staff resistance is the primary barrier to change and the extent to which participation can serve to overcome such initial resistance. Reviews of the change literature, both in the field of education and more generally, indicate that the beliefs that resistance to change is "the problem" and that participation is the solution are well-established; however, they also conclude that the evidence for these beliefs are flimsy at best (Giacquinta, 1973; Dunn & Swierczek, 1977). Recent studies in the field of educational

change do not provide a definitive answer. On the one hand, Berman and McLaughlin (1977) report that certain forms of participation, especially with respect to decisions about implementation of an innovation, contribute to later implementation and incorporation. On the other, Gross, Giacquinta, and Bernstein (1971) provide careful documentation of one innovative program that failed in spite of initial teacher support for the change. These suggest that resistance is a response to the problems associated with implementation. Moreover, Rosenblum and Louis (1979) present evidence from a major national study indicating that centralization of influence rather than influence-sharing through participation facilitates effective planning and early implementation.

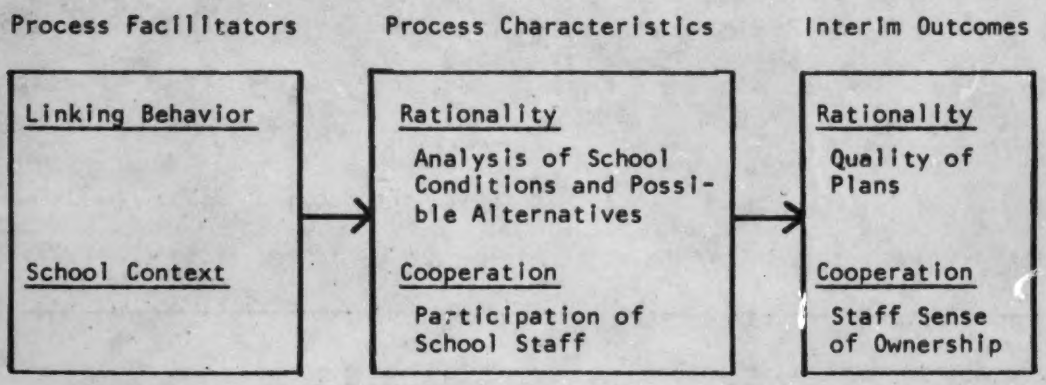
It should be noted that participatory or cooperative planning is not seen as an end in itself. As with the case of rationality, it is a precursor to successful change. Rationality is expected to lead to a product, the technical quality of which affects prospects for success--that is, to a strong plan. Cooperation is expected to produce an attitudinal state, ownership of the project or at least the absence of resistance, which sets the stage for effective implementation and institutionalization.

The above discussion indicates that, at present, the research base behind the assumptions that rationality and cooperation contribute to successful change is limited. More needs to be known about the consequences of rational planning and cooperative relationships and also about the factors that contribute to these aspects of change processes before research can provide useful guidance to practitioners. In this and

subsequent reports, Field Studies will examine interim outcomes of the change process, such as the quality of plans for change and the extent of commitment to or ownership of the project, characteristics of the change process, and factors facilitating or inhibiting the change process. Figure 1 presents a graphic display of Field Studies' guiding conceptualization.

Figure 1

GUIDING CONCEPTION OF CHANGE PROCESS



Focus of the Report

RBS regarded its work with the 11 districts as developmental. The corporation is still extending and refining its approaches to planning for change. Consequently, RBS staff did not enter the schools with fully-developed ideas or materials for school improvement. Instead, they brought general frameworks for change which were subject to revision and further explication. In effect, RBS offered participating schools the opportunity to create a new school program in return for feedback on the approaches. Moreover, most schools did not fully develop plans for new programs in their first year, nor was this expected.

The nature of the school projects required that the focus of the research described in this report be narrowed in several ways. First, RBS concentrated its first year of activity on local school improvement teams rather than the whole school. Team members were responsible for planning the new programs, and thus were the only individuals actually engaged in the change process. Membership often cut across school and district boundaries, ranging from students to superintendents, parents to professors. Consequently, the degree to which rationality and cooperation characterized the work of the teams, rather than the efforts of an entire school, was examined.

Second, focusing on the teams narrowed the range of school context factors investigated. Although the research identified factors which impinged upon the teams' work, such as individuals' motivations for participating, school and district support for the project, and structural barriers to participation (e.g., time availability), more complex issues related to the nature of schools as organizations were beyond the scope of the study.*

Third, the RBS approaches to school improvement were concerned with the planning stage of the change process rather than subsequent stages like implementation or institutionalization. Thus, the findings of this report pertain to developing plans for school change, not putting such plans into action.

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*A study of the organizational characteristics of the schools is available in a separate report, Firestone and Herriott, 1979. Subsequent research integrates organizational and process variables.

Finally, because the emphasis on planning by the teams precluded looking at any outcomes of the change process concerned with implementation or institutionalization, interim outcomes were selected which seemed to be relevant to how future work would proceed. It seemed most appropriate that these interim outcomes should be related to rationality and cooperation because, according to the literature, these two characteristics are believed to lead directly to success in later change stages. Rationality is supposed to affect these later stages through the development of a technically sound plan. Because the sites had not come up with a plan by the end of the first year, the extent to which they followed a set of interrelated tasks was used as one interim outcome. Cooperation is thought to influence subsequent change stages by creating positive attitudes toward the change. The extent to which team members began to develop a sense of local ownership over the project could be assessed, and thus was used as a second interim outcome.

It should be noted that this is a report on exploratory research. This paper is intended to identify and sharpen ideas about school improvement for future research. It is a first attempt to make sense out of field data collected during one year of research and to apply those data to the assumptions identified in previous sections of this chapter. Even through the language of rigor is adopted by discussing how "factors affect outcomes," the purpose is to suggest possible relationships for subsequent examination rather than to present conclusive findings.

The RBS Approaches to Change

RBS created three components within its Development Division to develop approaches to school improvement in the program areas of basic skills, career preparation, and citizen education. There was some general corporate guidance to clarify the general outlines of these approaches, and the interest in rationality and cooperation came from that source. However, each component was given considerable leeway to accomodate to the state of the art in its field as well as to the experience of its staff. The biggest difference among the components was in their program areas. Beyond that, although their approaches varied in detail, they shared a number of common emphases.*

For instance, all three approaches required linking agents to adopt similar roles in working with schools. Piele (1976) distinguishes three such roles:

- The resource finder who conducts information searches to find answers to a school's questions but does not conduct analyses of client problems.
- The process helper who becomes involved in the school's problems by helping to collect data and analyze conditions but who remains neutral with respect to the substantive problem or the decision made.
- The solution giver who is familiar with one or more alternative practices and advocates their use to a school.

The RBS approaches required a process helping role since the linking agent was expected to become familiar with conditions in the school, suggest ways to go about planning a specific program for a school, and provide some technical assistance in doing the planning. However, decisions

*Information on the specific approaches is contained in Thomas and McGrail (1979) and the components' proposals which are available from RBS.

about what program would be implemented in the school rested with the local team.

The approaches also had a similar content focus. Some change approaches--like T-groups, and psychotherapy--emphasize the development of the individual's interpersonal skills. Others, like organizational development, focus on the development of the group's or organization's capacity to analyze or solve problems (Schmuck et al., 1977). Still others focus on technical problems--such as the improvement of instructional techniques, budgeting procedures, or management information systems. Each of these is legitimate for some schools under some conditions. The RBS approaches focused on improving the technical aspects of instruction. Individual and group processes were not necessarily ignored; in some schools considerable attention was paid to leadership development, for instance. However, these concerns were secondary and were typically addressed as a means to further the technical problem-solving process.

The technical content of the approaches varied somewhat, but they always combined elements from two knowledge bases--(1) theories of managerial decision-making and the literature on planned change and (2) the content area in the component's field. This content might include ideas taken from special programs in the areas of citizen education, or career preparation, or the current research on how time-on-task and different classroom management strategies affect achievement.

Since the approaches were intended to be transportable--i.e., strategies that linking agents not employed by RBS could use to assist schools--

the components believed they had to be based on a codified set of procedures. New linking agents could then be trained to use the procedures and adapt them to differing local conditions. To that end, each component developed a set of steps as an organizing principle. The steps included such activities as clarifying goals in the relevant program area, identifying variables that could be manipulated to improve student learning, collecting data on conditions in the school, analyzing data to identify needed changes, reviewing possible alternatives, and combining alternatives into a program appropriate for a school (or in one component, for a classroom). The components differed somewhat in the number and specificity of steps, their commitment to following the steps in a linear sequence, and even their formal acceptance of the need for a fixed set of steps. However, in practice, each component took its schools through a very similar sequence.

Commitment to the steps was a part of the process-helping orientation, but this orientation left responsibility for making program decisions with the school. Hence, the components sought to develop cooperative, or collaborative, relationships with the schools so school and linking agent could work together to help the schools come to well-based decisions. Each component developed its own definition of a cooperative relationship and why it was important. However, the components seemed to share the belief that each party to the relationship--the school and the linking agent--brought different knowledge and expertise to the situation, and that these differences should be reflected when decisions were

made. RBS had technical knowledge while the school had concrete information on local conditions that might affect project outcomes. As one component's proposal explained (Basic Skills, 1978; p. 20):

> Collaboration does not mean that researchers and practitioners simply change roles, or that everyone does what appeals most to him/her, or even that everyone has an equal say in all matters. It means here a working relationship in which the expertise of each collaborator brings to the task is recognized and respected by the other. In such relationships, leadership is expected to shift among the parties according to the nature of the need and the appropriateness of each party's expertise.

Thus, effective planning was to be the result of the joint sharing of different knowledge resources.

Research Strategy

Field Studies used a comparative case study strategy to examine the enactment of these approaches in schools. Case study research commonly involves the use of a range of data collection techniques often referred to as qualitative or ethnographic methods in order to develop a composite description of a school and its project over time. These methods may be supplemented with standard quantitative techniques like surveys (Sieber, 1973). Case studies are typically particularistic since they portray events in one situation. They are holistic in that they try to portray the interplay of as many variables as possible that affect or result from a situation. In that regard, they may be the ultimate multivariate study. Case study research is also longitudinal. It tells a story that covers a period of time.

This strategy had several advantages for Field Studies' purpose. First, it is exceedingly useful for the examination of the change process, a critical prerequisite for this research. Fullan and Pomfert point out that:

> There is a singular lack of curiosity about what happened to an innovation between the time it was designed and...the time that the consequences became evident.... The whole area of implementation, what the innovation actually consists of in practice and why it develops as it does, was viewed as a "black box" where innovations entering one side somehow produce the consequences emanating from the other. (1977: 336-37)

Their observation holds as well for planning work. Documentation on how project objectives and procedures are designed and agreed upon is singularly lacking. [For some exceptions, see the case studies in Herriott and Gross (1979).] The longitudinal, qualitative nature of in-depth research provides a useful way to portray the events of a process as they unfold in time--to describe what takes place in the black box.

Second, case study methods are useful for the examination of contexts. As discussed above, one of the guiding assumptions of this study was that school contexts have a massive impact on the work of linking agents and the uses which are made of their approaches. One of the primary rationales for the use of in-depth methods is the belief that social-ecological settings have a significant impact on the activities and interactions of individuals; these methods are intended to facilitate a fine-grained analysis of the interaction between setting and action (Wilson, 1977).

Third, case study methods help identify the meanings of settings and events for the various participants (Wilson, 1977). The issues of

interest in this study--rationality and cooperation--draw attention to the way that people identify and observe the facts of a situation, whether these be relatively "objective" data such as test scores or more ephemeral observations on interpersonal behavior. Often what is important is not the "reality of events" as seen by the researcher but the "definitions of the situation" held by the actors involved; these may vary among the individuals and groups involved.

Finally, case study methods are useful for developing new concepts (Guba, 1979; Sieber, 1973). Although there is a growing body of research on educational change, there remains considerable ambiguity with respect to the issues under consideration in this project. New concepts are needed, not only to describe what schools are like, but also to help understand the processes by which individuals and groups decide what their change projects should accomplish and carry out their plans.

Frequently, case study research is limited to the study of one specific setting (Guba, 1979; Wilson, 1979). Field Studies' approach was intentionally comparative for a number of reasons. First, the phenomenon of interest lent itself to comparison if only because RBS was developing three approaches in different program areas and was working with a number of schools. Second, Field Studies sought to identify lessons from this work that would be useful to both the corporation and the larger R&D community. While there are severe limits to the ability to generalize from one situation to another in social science, some techniques are more effective than others (Guba, 1978). Kennedy (1978) has begun the development of guidelines for generalizing from single case studies, but she points out that

lessons drawn from several cases are much more firmly based. Comparisons help uncover basic relationships that might not otherwise be detected (Welck, 1976). A relationship between two variables or a pattern of activity may be so taken for granted in one setting that it is not even noticed by a trained observer. Only when the observer moves to another situation where the pattern in question is absent does its importance become clear.

As early as the first meetings in which component staff negotiated a relationship with schools, Field Studies observers were present in order to document those initial contacts and to describe their specific role in the change process. Observers would quietly, but openly, keep a running record of activities in meetings. As colleagues in the same organization, the observers were able to discuss events in schools with RBS component staff and obtain some information on their perceptions. However, the decision to document events at nearly every school with which a component worked precluded extensive field work and rapport building at each site. Hence, observers continued to be strangers who had little access to local sentiments and perceptions of the change process, especially those of teachers and other "lower participants."* In addition to observational data and informal interviewing, the documents and materials prepared by component staff and school participants were collected for analysis.

In this report the qualitative data are used in two ways: (1) to construct case histories of school improvement teams' activities in three

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*The Field Studies research plan for 1979-81 calls for more intensive field work in schools to overcome this problem.

schools and (2) to develop measures for a number of variables whose relationships are examined from a more quantitative perspective. Specific discussions of the methodological and analytic techniques employed in each case are contained in the respective sections of the report.

Organization of the Report

The remainder of this report is divided into three chapters. Chapter II presents short case histories of the work of three teams to illustrate for the reader the nature of the planning activities in the schools along with demographic data on the schools and teams. Chapter III examines the work of all 11 teams to identify some initial results of their activities and some factors that facilitated the planning process. Chapter IV summarizes the findings and identifies questions for future research.

CHAPTER II

THE TEAMS IN ACTION

RBS intended for local school improvement teams to be the vehicles for testing the approaches and planning the new programs. Team members were to meet regularly to perform the tasks required by each planning step, and at least partially, to assist with implementation. The composition of the teams varied somewhat among the RBS components, but as a minimum the teams were to include teachers and administrators. RBS expected that by having school personnel participate in, and ideally direct, the creation of the programs, they would develop a sense of ownership of the project. School ownership then would facilitate implementation and increase the probability that the programs would become institutionalized.

The purpose of this chapter is to provide a more concrete sense of the school settings within which the teams and RBS worked, who the team members were, and the nature of the activities they performed. The chapter is divided into three major sections. The first contains background information on the 13 schools that became involved in the school improvement effort--their demographic characteristics and the composition of the school improvement teams. The second section presents brief case histories of three of the teams. They illustrate how the component approaches, linker behavior, school contextual factors, and the relationship between RBS and school staff affected the planning process. The final section highlights some important issues in planning for change raised by the case histories. These issues are further examined in Chapter III.

The Schools and Their Teams

This section describes the schools and the teams with which RBS worked to develop the approaches. The schools were not selected randomly for this development work. Instead they were selected according to criteria such as their willingness to engage in school improvement activities or the kind of student population they served.* The section begins with a demographic overview of the schools selected. The data presented here suggest that RBS did not begin work with sites where success was ensured from the outset. These schools faced the same problems of low test scores, changing student body composition, and declining enrollment that many schools across the country face. Following the overview there is a discussion of the composition of the teams that were formed.

A Statistical Overview of the Schools

As a reference point for the reader, Figure 2 lists the 11 sites, their grade levels, settings, and the components with which they worked. Additional data on the characteristics of schools discussed in this section are contained in Appexdix A.

The schools working with the components differed considerably in terms of their student composition, their staffing, and their settings. The components deliberately selected sites which had to contend with a number of educational problems. Generally, the Basic Skills Component (BSC) intended to work with elementary schools, Citizen Education (CEC) with junior highs and middle schools, and Career Preparation (CPC) with

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*For further information on recruitment and selection the reader is referenced to Firestone (1979b).

Figure 2

THE ELEVEN SITES

	Site		Level	Setting	Component
1.	Rural District	Smalltown Elem. Smalltown Middle Southend	Elementary Middle Elementary	Rural	Basic Skills
2.	Middleburg		Elementary	Suburban	Basic Skills
3.	Patriot		Elementary	Small City	Basic Skills
4.	Urban		Junior High	Big City	Citizen Educatio
5.	Farmcenter		Junior High	Small City	Citizen Educatio
6.	Riverside		Middle School	Big City	Citizen Educatio
7.	Suburb		Junior High	Suburban	Citizen Educatio
8.	Green Hills		Junior High	Suburban	Career Preparati
9.	Neighbortown		High School	Rural	Career Preparati
10.	Big Town		High School	Small City	Career Preparati
11.	Old Town		High School	Small City	Career Preparati

high schools and to some extent junior highs. For the most part, this intention was met. BSC formed two school teams and one district-wide team. In Rural District, the superintendent set as a condition of participation the inclusion of the district's middle school, so this team was a K-8 unit. CPC included one junior high and three high schools.

School enrollments ranged from 375 in Southend to 3146 in Oldtown. Because they worked with upper grade schools, CPC and CEC dealt with larger schools than BSC. BSC's largest single school was about the same size as CEC's smallest (around 670). CPC had to deal with the greatest size range. While the smallest school in the other two components was about half the size of the largest, CPC's smallest school was less than a quarter the size of its largest.

The schools varied in their ethnic composition as well as their size. Each component had one school with a predominantly minority student body, and one that was nearly all white. In most cases, blacks were the largest minority group represented, but in Urban Junior High a significant proportion of the student body was of Hispanic parentage. Washington, Farmcenter, and Riverside also had 10 percent or more Hispanic students.

Other demographic data provide an indication of the instructional problems the schools faced as evidenced by the proportion of students who were behind in reading and the instability of the student body. Each RBS component included at least one school where the principal estimated that more than half the students were a year or more behind in reading and where a tenth or more of the students had transferred into the school over the course of the year.

Enrollment is usually a good predictor of staff size. That relationship held with the components' schools. The rank-order correlation between enrollment and total number of staff for these 13 schools was .97. The distributions of staff among different kinds of positions differed, however. No school consisted of simply a principal and a set of classroom teachers. The number of classroom teachers varied between 13 and 150, representing 62 percent to 90 percent of the staff. The number of aides varied between zero and 15; only one school (Southend) had more than 15 percent of its staff as aides. For the most part, elementary schools had fewer classroom teachers than the other schools, and the high schools had fewer aides. None of the high schools had more than seven percent aides.

With the advent of federal categorical aid programs, some portion of the staff in many schools has been supported by special program funds from outside the district. Schools risk losing staff if related funding requirements are not met and thus, another set of dependencies for schools is created. On the other hand, some of this special money is an indication of a school's interest in change, since it comes through competitive program awards. Therefore, an examination of the percent of staff supported by discretionary program funds provided an indication of the external requirements with which a school had to contend. Four of the RBS schools supported over 10 percent of their professional staff with discretionary funds: Patriot, two of the Rural schools, and Urban. All the aides were supported by such funds in Smalltown Elementary,

Riverside, Suburb, and Neighbortown. On the whole, the schools did not rely very heavily on outside funding.

With declining enrollments and a tightening job market for teachers, one would expect to find experienced teaching staffs at most schools. This was more true of the Career Preparation schools than those working with Basic Skills, but no school had a faculty with 20 percent or more first year teachers. On the other hand, the staffs differed considerably in their post-baccalaureate education. The percent of staff with master's degrees ranged from zero in Southend to 63 percent in Middleburg with the average being 27 percent. Middleburg and Urban had the most educated faculties; faculty at the Rural Schools had the fewest advanced degrees.

The schools operated in very different community and district settings. Each component had one or more urban schools and one suburban site; however, there was considerable variation in the urban communities. Two schools, Urban and Riverside, were located in big cities, i.e., parts of a major urban complex, either the city itself or a city subsidiary with a population of over 100,000. The four remaining urban schools were in small cities in the 40,000-60,000 range. In addition, two components each had a rural site.

The 11 districts ranged in size from 2400 to over 230,000 students. Five had fewer than 5000 students. Eighty-eight percent of the districts in the country have less than 5000 students (National Center for Educational Statistics, 1978). Thus, the components overselected large districts. While all components dealt with some districts with more than

5000 students and at least one that was smaller, CEC worked with the three largest districts.

Declining school enrollments are a growing problem in the seventies. Each component had at least one site with a significant decline in district enrollment over the previous five years. Five of the 11 districts had experienced a decline of 10 percent or more.

Team Composition

Each school, or in one case district, formed a team which worked with a component and carried out the planning approaches. (See Appendix B for the data discussed here.) The teams varied in size from a low of six to a high of 26. Five of the teams had 11 or more members.

The composition of the teams varied considerably from component to component. BSC was the only component that did not work with either students or community residents. All other teams had some community representation, although in half of those cases at least some of the community representatives were also school employees. Five of the eight CPC and CEC teams had community representatives. Eight of the 11 teams had a regular district representative.

It was anticipated that the primary responsibility for implementing the changes developed through the component approaches would fall to the professional staff, and that implementation would be supervised by school administrators. Therefore, it was considered relevant to find out what proportion of the team were school professionals, either classroom teachers or others. The proportion of professionals ranged from 23 percent in

Riverside to 82 percent in Middleburg. Five of the 11 teams had 50 percent or more professionals. There was at least one high professionally-staffed team in each component; however, the three teams with the most professionals were in BSC. In addition, BSC had an intermediate service agency representative work with each team partly to provide additional short term support, partly to be able to move in and take over for the RBS linking agent at a later date, and partly to receive training so the approach could be exported to other schools and districts.

Case Histories of Planning for Change

This section contains case histories of the work of three of the school improvement teams. These histories cover the work of the team through the end of the 1978-79 school year. Each one has five parts: (1) an introduction to the school, (2) an examination of the recruitment process and its implications for later work, (3) a description of the change activities, (4) a discussion of outcomes for the school, and (5) some conclusions that can be drawn from the single case. Following the histories is an overview containing some general observations about the change efforts at the three sites.

These three case histories were selected because they illustrate particularly well the dynamics and complexities of the change process. Each history was written by the Field Studies staff member most familiar with the site. In most cases, the writer made several trips to the site to observe meetings of several different groups: school improvement teams, sub-groups of the team, school and district personnel, school

boards, and RBS staff. In addition, events on site were discussed with component linkers over the course of the year to obtain their perceptions of team activities, a better understanding of the component approaches, and more information on the change process and the school setting. In writing the histories, principal reliance was placed on field notes compiled while the teams were in operation. Reference was also given to written documents, logs kept by RBS staff, and interviews with other participants. Because there were few interviews with school staff, their perceptions of events were generally unavailable.

Preliminary drafts of the case histories were presented to the RBS component staff to provide a check on the accuracy of the descriptions. Meetings were held to discuss suggested revisions in the drafts, and as a result, changes were made. Of cource, the ultimate responsibility for the conclusions drawn from the histories rested with the researchers.

To protect the confidentiality of the individuals whose actions and sentiments are reflected in the histories, pseudonyms have been used. These pseudonyms are different from those used elsewhere in this report. The histories refer to the principal RBS site workers as "linkers." This term is used as a generic reference to the RBS field staff role but not all of the component staff viewed themselves as such. For the sake of simplicity, finer distinctions are not made in the text. Finally, the histories are intended to provide the reader a flavor for what went on at the sites. They should in no way be considered as evaluations of those activities.

Central School

Central was located in a medium-sized city on the fringe of a major metropolitan region and served a predominantly black student body. Although the school only recently emerged from several years of racial hostilities, the atmosphere on campus during project activities was calm. The teachers were unionized, and in the fall of the year prior to the project's start there was a teachers' strike. The major conflict during the strike was reported to be between the teachers and the community. The superintendent resolved the strike, and in doing so emphasized the need for increased community involvement in the schools. Initially, this move antagonized teachers. However, the superintendent's efforts resulted in several positive outcomes and consequently did not engender much lasting resentment. Instead, the teacher-administrator relationship was characterized more by vigilance than antagonism. The component linker noted that teachers and administrators became mostly power-equals as a result of the strike, and each party has been careful to maintain that balance.

During entry into the system, RBS received the full support of the superintendent and the principal.* Support from teachers was more lukewarm. Although by June the project was on schedule as far as RBS was concerned, the nature of the process by which planning occurred had been altered considerably from the original intentions of the parties involved.

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*The superintendent had had extensive contact with RBS prior to the beginning of this project.

Recruitment. Central was not on the list of potential sites RBS originally compiled. Its appropriateness as a site was suggested to RBS by someone outside the school system. The recommendation was made because Central had a history of involvement in the particular curriculum area of concern, and yet its program did not conform to state guidelines. To remedy the situation the superintendent had created a special district position the occupant of which would coordinate activities in the area, had hired a highly-qualified person to fill the position, and had begun to look for assistance from outside consultants. It was at this point that RBS contacted the superintendent.

RBS had already developed criteria to use in selecting project sites. These criteria included the requirements that the site already have an investment in the curriculum area and that key actors at the site (i.e., people who would be affected directly by the project) not demonstrate open opposition to the idea of the project. At Central, RBS staff reported that the superintendent was highly enthusiastic about the possibility of RBS' involvement. The principal expressed similar enthusiasm. Although teachers were less enthusiastic, they were apparently not opposed to the project. Thus, Central met the requirements, and the school was selected as a project site.

During entry no problems arose for RBS. The ease of entry was partially because the project made few demands on the school other than staff time. At this stage of the process, time did not present a problem to any of the participants; however, the amount of time that some team members had available to allocate to project activities decreased later in the year.

Originally, RBS had hoped that the team of planners would be volunteers; however, the actual selection of team members was left to the school. The RBS linker recommended categories of people to be included, but the principal and the superintendent decided which individuals should participate. Team members either were appointed (e.g., students and teachers) or requested to participate (e.g., the community representative).

The superintendent's appointment of the team coordinator seemed particularly critical for the direction the planning process took. At this site the strategy was to provide technical assistance directly to the coordinator. The coordinator would lead the planning team activities while RBS staff remained in the background. The superintendent appointed the newly-hired person referenced above as the team coordinator. Although the person's official position was at the district-level, the office and primary responsibilities were located in the school. The person stated that this, combined with the newness of the position and its occupant to the system, made it difficult to build a base of support for activities in either the district or the school.

According to the RBS linker, the motivations of individuals to participate in the project varied. The superintendent was interested in upgrading the district's curriculum program and saw the RBS project as a way to address this objective. Although the team coordinator was assigned to the project, the individual had two positive motives for participating: (1) to further an already-existing interest in the curriculum area and (2) to establish a role in the district and at Central. A prior interest in

the content area made the project appealing to the principal. In addition, the project was seen as a way to get free assistance with staff development. The teachers' motivation was mainly a function of political rather than curricular considerations. To maintain the balance of power, it was important for them to be involved in any new district activities. The community representative had a desire to learn more about the school. This individual also had political ambitions and felt participation would provide voters with evidence of an interest in education. The students were assigned to the project and had no clear motivations or expectations.

Activities. Initially the local planning team consisted of the coordinator, the community person, the assistant superintendent in charge of curriculum and instruction, several teachers, a guidance counselor, students, and the principal. According to RBS staff, the component did not consider the linker to be a team member at first. The size of the team concerned the linker and the coordinator because they felt fewer people could plan more effectively. They, in conjunction with the principal, decided that the team had to be broken into more functional units. At first they intended to suggest a single method for reorganization to the team, but the principal advised them to propose several alternatives to the team because of the sensitivity of team members to how decisions were made. This was done, and the team agreed to form a core planning team (consisting of the coordinator, the community person, the principal, a student, a guidance counselor, and two teachers) and an advisory group (consisting of everyone else). The advisory group would convene with the

core planning team every third meeting to review the work of the core team.

The teachers in both groups were department chairpersons. At Central these people taught partial class loads while the remainder of their time was allocated to working with and for other teachers. The chairpersons were the major conduits through which the principal and the faculty communicated and were major sources of influence in the school.

Because of difficulties in getting all of the team together, the first team meeting did not occur until a month later than RBS intended. At this meeting the RBS linker compressed two two-hour orientation sessions into one two-hour session. Five subsequent team meetings were held. By the end of the last session, the team had defined the content area, identified a list of relevant goals, and had begun to conduct surveys of students, teachers, and the community in order to narrow the goals to those which seemed most crucial to implement.

In addition to attending the planning team meetings, the linker met with the coordinator in planning sessions. According to the linker, these sessions were welcomed by the coordinator because they helped reduce anxieties over providing leadership to the team. By structuring what was to happen at team meetings, providing technical competence, and offering the coordinator professional support, these sessions made the coordinator feel more comfortable with the position. Most of the linker's time was spent with this one individual.

Initially the linker felt a tension between the commitment to letting the team determine the content of its plan and the commitment to what was

considered to be good practice. This tension manifested itself most frequently in situations in which the team made, or was on the verge of making, decisions about the program on the basis of limited knowledge of the field. The linker discussed this problem with other RBS linkers. Together they decided that the team should be presented an array of possible programs in the content area and asked to locate them on a continuum with the endpoints denoting the area as narrowly-conceived and the area as broadly-conceived. The linker would then point out the direction the team was headed and suggest alternatives to this direction. This new tack was discussed with and approved by the coordinator.

As a consequence of these discussions, the linker intervened and became more directive. The field observer noted that the team did not receive the action well. They grew restless and expressed frustration over having performed a time-consuming task only to have someone suggest another way of doing the task. They perceived that the linker and the coordinator were attempting to wrest project control from them and that both were operating from an already-established conception of what the program was to become. One teacher complained to the coordinator that the team members felt they were being "manipulated." This issue of a hidden agenda was addressed directly by the linker and coordinator at the next meeting; they assured the team that they did not have one. The team seemed satisfied with the explanation, and the tension subsided. Nevertheless, the linker did not resume a passive posture, and instead, continued to function as a team member whose opinions were to be challenged just as others' opinions were challenged.

The idea of the split team did not work out as intended. As noted above, the team decided that the advisory group would meet every third session. However, when the time for the first advisory group meeting came, only the core team members attended. The school year ended before another combined session could be scheduled.

As the end of the school year approached, team members (particularly the teachers) became more pressed for time. As a result the team decided that the coordinator and the linker should design the student and faculty surveys. The surveys were the means by which the team had decided to accomplish the teacher and student needs assessments which were a part of the planning model. The principal also became involved in this development work. The individuals who actually constructed the surveys informally discussed what they were doing with individual team members, who then suggested revisions. These revisions were taken into account before surveys were finalized. With the assistance of the community representative, the linker and the coordinator also produced the community needs assessment.

Outcomes. As RBS anticipated, the outcomes most evident at the end of the year were changes in individuals' attitudes and behavior related to the planning process, rather than changes in school or district organization. However, the changes which occurred seemed somewhat contrary to the attitudes and behavior RBS intended to foster. For example, by the end of the year the team was willing to allow the linker and the coordinator to assume responsibilities the team had jealously guarded earlier in the project. Essentially the team moved from performing tasks to reviewing and revising the work of others. In addition, the members of the

non-core planning group effectively ceased participating, and as the year wore on, core members often straggled into meetings well after the scheduled starting time. The coordinator did not have the kind of influence needed to alter this increasingly limited participation. As a consequence, the high degree of project ownership which RBS had hoped the team would develop was not evident in anyone other than the coordinator, the principal, and the community representative.

Conclusion. In the initial stages of the project, RBS received heavy administrative support and mild teacher interest. The administrator's support was stimulated by a desire to improve the quality of the existing program; the teachers' interest was stimulated by a desire to be represented on the project.

Over time the kind and degree of participation by team members, especially school staff, shifted from active and frequent to passive and sporadic. The decrease in participation seemed to be related to (1) the team members' initial motivation to participate, (2) outside demands on members' time, and (3) the role behavior of the linker and the coordinator. The teachers participated primarily for political reasons. Because they were mostly interested in protecting their power position in the school, they sought input into making final decisions rather than developing alternatives about which decisions were to be made. The linker reported that they did not really want to do the work. Hence, they were willing to shift the performing of time-consuming development tasks to the linker and the coordinator, while maintaining the right to advise and consent. On

the other hand, the coordinator, the principal, and the community representative had keen interests in the content area, and this interest was reflected in their active involvement in project activities.

The teachers' "advise and consent" function was encouraged by the time constraints which many members faced. The ebb and flow of administrative duties placed heavy demands on the department chairpersons at the end of the year. These demands coincided with the need for considerable development work on the RBS project; and according to the linker, the project became a lower priority than members' official school responsibilities.

The coordinator was in a difficult position in the school system. The individual had not been in the system long enough to develop influence and to gain control over the resources necessary to stimulate and maintain others' active participation. At the same time the superintendent saw the project as the coordinator's responsibility. Thus, project work had to be done, and the coordinator and the linker had the most time to devote to it.

The limited team participation corresponded with a low sense of ownership and commitment to the project among team members. In spite of these debilitating factors, the project at Central was as far along in the RBS planning sequence as the other RBS sites. However, the progress was more the result of the efforts of the coordinator and the linker than the performance of the planning team.

City School

Located in a large city, City School served a predominantly black clientele. Observers from the component suggested that the 79 adults in

the school were divided into a number of factions or cliques depending on such factors as whether or not they were professionals, what grades they taught, ways of handling the problems of a black identity, and personal friendships. Internal tensions were exacerbated by a recently completed strike and the announcement of an upcoming layoff of staff due to enrollment declines and budgetary problems. An on-site observer reported that the principal's relationship with some staff members and the central office was somewhat strained. However, the principal received strong support from community residents. In an interview the principal reported that many instructional and staff relations responsibilities were delegated to assistants.

One constant theme in this school noted by component staff was the attempt to instill pride in students' black heritage. This theme was carried through bulletin board displays, speeches by outside speakers, and classroom instruction. While teachers differed over whether students should try to leave the city for better alternatives elsewhere or stay and fight for improved conditions, they agreed on the importance of pride in one's racial heritage. This theme was emphasized by both black and white teachers.

Finally, another program required school staff to go through a goal-setting, program development process similar to the one developed by RBS. Some initial reservations about the RBS project stemmed from confusion between the two efforts and cynicism about the mandated one. Moreover, apparently because of the interest in black pride and developing a

local community, school staff were initially quite suspicious of outside experts, especially those representing the "white establishment."

Recruitment. In recruiting this school, RBS moved quickly through the district hierarchy but faced substantial lower-staff distrust. City's district was one of the last to be considered by the component. Shortly after a meeting with central office staff and the principal, it was selected as one of the project sites.

After selection there was then a break of one month before RBS could meet with all faculty. For the initial meeting, there was a mix-up over the starting time. The principal told the faculty to be ready for a 3:00 meeting and RBS that it would start at 3:15. However, the principal did not appear until 3:30. In addition, the anticipated layoffs were announced at the same meeting. Although RBS indicated that participation in the project was voluntary, the principal reported that the decision to have the project had already been made. An on-site observer reported that teachers resented having the project "rammed down their throats" and were suspicious that it would be used to evaluate teachers and prepare for layoffs. In the months that followed, the linker and a field observer working for RBS made numerous visits to the school to explain the project to staff and elicit their support.

Almost two months later, the school was ready for its first team meeting. A number of teachers and counselors had been officially appointed to the team. Others, for reasons that were not altogether clear, decided that the activity was important and chose to attend. One of those

independently recruited 14 girls from a school club. In describing the work that would be accomplished, RBS emphasized an interest in broad participation, but also stressed the requirement to follow generally the RBS planning approach. According to an observer, the tone of this meeting was basically positive, and the process in the school was under way.

Activities. Planning activities began with the first team meeting. Nine more meetings were held during the school year. Team stability was a major problem at City. Students, professional staff, and community representatives created different problems. As indicated above, one member recruited a number of students for the team. This independent recruitment continued through several meetings. At one time, as many as 22 students attended a meeting. Later, students complained to the Field Studies observer that some of their teachers would not let them out of class to go to meetings, especially since the sessions were always at the same time and conflicted with the same courses. There was considerable initial turnover among the professionals on the team. Initially, the grade level chairpersons, who were quite influential in the school, were assigned to the team. However, after the first meeting, they did not attend. The linker reported that no way could be worked out to obtain substitutes for their classes. Instead, a number of counselors and special education teachers who could free some time, and who were interested, chose to attend. Although an effort was made to recruit community representatives (and several parents did attend the first few meetings), the most stable "community" representatives were para-professionals working in the school.

Team leadership was another source of concern. City was the only team out of 11 that did not have a principal as an active member. A special teacher in the school was initially assigned to coordinate the team's work because the individual did not teach regular classes and had time. However, at the first meeting, another teacher was elected acting coordinator. As one of the few white teachers in the school, the coordinator was not highly influential among the staff. The Field Studies observer noted that this person did not play a directive role at meetings. In addition the coordinator had difficulty getting materials needed by team members reproduced for the meetings. As a result, handouts that were critical for group discussion--e.g., copies of the district's official goals--were not available for distribution to the full team on several occasions.

The early meetings were devoted to developing a set of goals for the school in the curriculum area. RBS introduced and explained the concept of goals and tried to get the team to identify school problems as a basis for writing goals. Typically, after an introduction the work would take place in small groups. In managing these activities, the linker had to take into account the lack of direction provided by the coordinator, the need to gear meetings to large numbers of students who were not familiar with the planning concepts RBS used, and the component's belief that as part of its cooperative relationship, it should not direct meetings. For instance, at one meeting, field notes indicate that the transition from the initial presentation on goals to the small groups went as follows:

> There was a question about whether students, parents, and teachers should meet separately so each group could identify its own goals, but the linker wanted to have teachers and students meet together so students could get the idea of what the concept of goals meant. Meanwhile, the linker apologized for being directive. It took a long time for the groups to form. The linker specified four locations and politely indicated who the linker wanted to go to each place while the students especially waited for someone to tell them where to go. Meanwhile, other adults came around with another instruction to have the students identify the major problems they saw or the major things they wanted changed in the school.

On another occasion the linker was not so directive, and what was announced as a five minute discussion with the whole team went for 40 minutes.

The group sessions proceeded very differently. For instance, on one occasion, four groups were supposed to identify problems in the school. In one, a counselor told students to write out the problems they saw. While students wrote, adults talked at the other end of the table. In another, the teachers tried to question students in ways that would bring out their concerns. In a third group, a para-professional lectured three students about taking responsibility for their learning. Nevertheless, a clear set of themes concerning school problems came out of these discussions. Students reported that they were very excited about these meetings. They independently initiated activities to canvass their friends, and even teachers, on the problems they saw.

At the third meeting, a subcommittee of students and faculty was formed to synthesize the diverse recommendations into a set of possible goals. This group reviewed district goals that were already developed and identified six that it recommended adopting.

During the fourth meeting, the team unanimously accepted the committee's recommendations. At that point two team members wanted to move directly to publicizing the goals in the community and getting both parents and teachers to identify ways to meet them. However, the RBS approach's next steps called for obtaining evidence on how well the goals were being met. Therefore, an RBS measurement specialist was introduced to the team. The specialist told the group that RBS wanted to conduct small-group interviews with school staff in order to assess the status of the goals in the school. There were two reactions to this speech. One of the community representatives objected to the emphasis on student outcomes, saying that other outcomes should be considered. The coordinator wanted to move directly to program design or at least to developing a questionnaire. However, RBS staff firmly repeated that a step had to be taken before an instrument could be written. After some discussion, that next step--breaking goals into more behavioral terms which could be measured through questionnaire or test items--was initiated.

The next set of meetings was devoted to respecifying the goals as behavioral objectives. Much the same small group process was followed. This task was complicated by the fact that many of the adults appeared to not understand what constituted good objectives. Considerable time was spent briefing the group leaders so they would understand what was to be accomplished. Within the small groups, some leaders devoted most of their time to questioning designed to get students to identify objectives. As a result, adults took on more the role of instructor than planner. Nevertheless, the work progressed and by the last meeting instrument items had

been developed. However, RBS' procedures for protection of confidentiality required that the instrument receive corporate approval. This step plus the pressures created by the end of the school year precluded administering the instrument before the summer recess.

Outcomes. RBS managed to form a team at City School in spite of considerable initial distrust and the absence of firm administrative support. However, with its heavy student representation, leadership problems, and the absence of grade level chairpersons, the team was not well stocked with the kind of influentials who might be expected to build support for change. Students took their tasks quite seriously and were enthusiastic about what they perceived as an opportunity to participate with adults as equals. Although adults assisted with instrument construction, the emphasis on training students placed adults in the instructor role and increased their sense of distance from the process. RBS staff initially hoped that by the end of the school year, the team would have designed a plan to be implemented in the following year. Because the team got off to a late start, it did not get this far. However, it did manage to create the instrument for use at the beginning of the next year. Overall, City proceeded about as far as most of the RBS teams.

Conclusion. The City team highlighted the potential tension for linking agents between operating a rational approach with a logical sequence of tasks and maintaining a cooperative, non-directive approach. RBS was concerned about avoiding value judgments and external direction of activities. Yet, its planning approach relied heavily on a set of

prescribed steps that were not always obvious to or understood by school people. At several points considerable explanation and even some pressure was needed to keep the team "on course." Depending on the circumstances, when that pressure was missing, the team either drifted or threatened to take off in a direction for which RBS was not prepared. Hence, it was often necessary for the linking agent to intervene in order to maintain some fidelity to the technical aspects of the approach.

The school context also had an important impact on team activities. For instance, the tasks of pulling together a team and keeping it intact became especially problematic at City because the school's operating procedures for scheduling classes, obtaining teacher release time, and giving students free time all precluded the formation of a stable team. To these procedures must be added the role played by administrators, the special agendas of certain faculty members, and the distributions of influence and esteem within the staff. Lack of familiarity with the planning concepts RBS employed seemed to be another barrier to steady progress. However, the students' enthusiasm and the linker's special effort to keep them involved seemed to be important assets.

Union School

Union School was located in a city of over 40,000 population and served a black and Hispanic clientele. The school and district faced some serious student achievement problems. The bulk of the students in the school were one year or more behind grade level in reading. Because of its test scores, the district received considerable adverse publicity

and was under the threat of state sanction. The superintendent was not a curriculum specialist. He sought assistance from many sources and the district had numerous special programs.

Teacher-administrator problems were also prevalent. The districts' chapter of the NEA was reported to be a strong advocate of teachers' rights. Union School had special problems because staff perceived the principal to be highly controlling. The principal reported that teachers resented the requirement that all teachers conduct certain activities at a particular time of the day. They also disliked what they saw as an unwillingness to provide adequate support on disciplinary matters. While this school did not initially seem a promising site, it became one of RBS' most successful efforts.

Recruitment. RBS relied heavily on intermediate service agencies (ISAs) in the state to help it select this site. This district was recommended by an ISA largely so it could get help in responding to the superintendent's repeated requests for assistance. ISA staff anticipated that the principal would be interested in the project, but they did not become aware of the tension in the school until the selection procedure was underway.

RBS staff met with district administrators at the ISA office twice in the fall of the school year. The first meeting was attended by the superintendent and an assistant superintendent. RBS staff described the RBS approach as a collaborative effort between the ISA and RBS. They indicated that RBS was looking for an opportunity to develop the approach

at the same time that it and the ISA would provide service to schools. They described the component's approach to planning and shared a pamphlet that identified numerous curriculum problems which the project could address. The impression was left that school personnel would be able to choose the curriculum problems for the project. RBS staff also clarified that they would expect the district to provide release time for teachers, to arrange for principals' participation, and to identify one district coordinator who would attend all meetings and be trained to carry the process to other schools. The superintendent did not pursue the details of the presentation, but he did ask if RBS could help the district with its "pull-out problem", i.e., the scheduling of compensatory education classes that required removing children from their regular classrooms. The assistant superintendent was much more interested in the general RBS approach. The assistant superintendent and superintendent identified two candidate schools in the district.

The second meeting was with the assistant superintendent, the Union principal, and the principal of the other candidate school. The second principal admitted considerable distrust of federal programs. Both principals raised numerous questions about how release time for teachers would be arranged. When told that the district would provide substitutes, they agreed to go ahead. However, before any outsiders presented their program to the second school, the second principal insisted on sounding out the staff alone.* The Union principal followed this lead, although agreeing to allow ISA staff to attend the meeting where the program would be discussed.

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*Shortly thereafter this school opted out of the project.

These two school meetings set the scene for a late fall meeting in Union School. It was attended by two people from RBS, two ISA staff, the assistant superintendent, the principal, and four Union teachers. RBS staff made essentially the same presentation as previously. However, they pointed out that because of unexpected delays in the development process they would only be able to provide materials and assistance with one curriculum problem for the coming year. Hence, there would be no choice in the problems to be considered. One of the teachers (who was a district NEA officer) asked a number of pointed questions about the time demands of the project, whether it would help resolve the staff "malaise" (referring apparently to tensions with the principal), and how it related to a state inspection of the district starting the same day.

Teachers showed considerable misunderstanding of the component's way of using research to promote change. One teacher wondered whether people would have to read a lot of research material at home. Another wanted to know if RBS would find research reports for teachers. As they came to understand that RBS was using existing studies to develop materials and assistance, the assistant superintendent asked why the component was validating previous research.

After the meeting, there was a heated exchange between the two administrators and an RBS representative. The Union principal complained about the lack of choice in problems to address, especially after RBS had indicated such a choice was available. The assistant superintendent concurred, asking again why RBS was "validating" existing research, and

demanding to see the RBS proposal to its funding agency. One of RBS' representatives ended the day by saying the meeting was the most difficult in the person's experience as an RBS employee.

RBS and ISA staff did not return to the school until early January. Then, they were not certain if they were attending a second session to negotiate a relationship with the school or not. They were pleasantly surprised when, after some clarifying questions which brought out that they would work on one curriculum problem for the remainder of the year and two other problems in future years, teachers and administrators seemed eager to begin work on the approach. RBS staff believed that reading the proposal helped site staff to better understand the project.

Activities. Once initial acceptance at Union was achieved, RBS began what was designed as a series of half-day meetings twice a month. These meetings had to be blocked out well in advance for two reasons. First, the ISA had agreed to make a representative available for all meetings. This person would provide help, act as an assistant linking agent in the meetings, and obtain training through the meetings so that the ISA could use the approach in other schools next year. The ISA representative's schedule was usually full and unpredictable, so meeting time had to be scheduled in advance. Second, the district required a fixed schedule to arrange for teacher release time during the day. The district's procedures for hiring substitutes were exceedingly cumbersome. While a predictable meeting schedule was helpful, it was not always enough to allow substitute coverage. On one occasion RBS brought a curriculum

specialist to the meeting, but the specialist and a second ISA representative wound up covering classes so teachers could attend the meeting.

In all, five meetings were held in the school, with a final session at the end of the year at the ISA. These meetings were consistently attended by the RBS linker and three of the four original teachers. Another teacher joined the team after the first meeting, having volunteered after hearing about the program from team members. The principal was in and out of meetings, and the ISA representative and assistant superintendent attended most meetings. RBS also sent out one specialist to provide training on how to collect data through classroom observation and another who showed team members how to interpret the data and offered suggestions on how to improve classroom procedures related to the curriculum problem.

Most meetings included a substantial portion of training. Teachers were introduced to existing studies concerning the problem area and received reference graphs showing the bi-variate relationships between student behavior and student achievement for different grades and subject areas. They were also trained on the use of forms which observers would employ to measure student behavior and procedures for computing scores from the observation sheets. Finally, school staff received several manuals.

There was considerable discussion at meetings. Several members criticized the original reference graphs which were difficult to understand and provided feedback on the layout of the forms and manuals. They raised questions about the observation methods which seemed to assume that the whole class was in the room most of the time. When they pointed

out that with their pull-out programs large groups of students were often out of class, the observation forms were revised to record the number of students out of class. Other materials were also changed.

One teacher raised a fundamental question about the approach in pointing out that the research provided aggregate figures on the whole class. In this teacher's case, interest was not in the whole class but in laggard students on whom special information was desired. This person's continued participation seemed problematic until the linker indicated that something could be worked out to provide small-group data. At a later meeting, the linker returned with a special form for use with specific children. Still later it proved feasible to collect data in that room on both the whole class and selected students.

Still, considerable time was available for "off-task" discussions which were primarily shop talk. Field notes from one meeting record:

> a digression by the district coordinator on the value of silent sustained reading as a way of increasing academic performance. One teacher suggested having silent sustained reading in the building, and the principal replied that it would be done the next year. Later another teacher said math drill was appropriate for high complexity tasks like having students do story problems. The district coordinator suggested giving children the number problems and having them write the story.

The coordinator had a host of concrete activities to suggest, and the group found these discussions extremely interesting and useful. The meetings were generally relaxed and enjoyed by the participants.

Although RBS encouraged the ISA to describe the approach as its own and the ISA person often opened the meetings, technical content was usually presented by the linker or other RBS staff members. The linker in

effect chaired meetings most of the time; although, as the above description indicates, the linker avoided being highly directive. RBS tried to arrange to plan each session with the district coordinator and the ISA person in advance, but both were too busy most of the time. Still, the linker was able to consult with them informally before introducing new aspects of the program. This strategy helped the program develop in the tense district context because local personnel had greater awareness of local conditions and sensibilities than did RBS. Moreover, it spread responsibility for the program to non-RBS participants who helped to keep discussions constructive.

One of the most tense problems concerned classroom observation. RBS' original intention was for teachers to fill out the observation forms while they worked. When that alternative proved unfeasible, the problem of who should observe arose. The teachers were afraid that the observations might be used for evaluative purposes. Several times during a mid-year meeting, ISA agents probed about which teachers would feel comfortable with being observed. While the teachers generally agreed to observation, they indicated that they did not want the principal involved. As a result the team had agreed that the observation would by done by RBS, the ISA, and the district coordinator. In fact, the others did not have time to observe, so the full burden fell on the linker who, as a result, spent 24 days observing in the school during a seven-week period. The linker was able to arrange team meetings so as to avoid discussion of particular teachers' data until the end of the school year. When team

members had more trust in the principal and the process, they shared their data with the principal.

Outcomes. Over the course of the year, the team moved far enough through the complete RBS sequence to allow all teachers to report some modification in their instructional or classroom management techniques. Teachers were pleased with the process and developed a high sense of ownership of the team. However, the most important impact was at the district level and concerned the pull-out policy. Teachers had complained about the policy for some time, and central office staff were aware of the problem, but there had never been any "hard" data documenting its extent. The principal pulled together the classroom observation data and used it to document for the district office the extent of the disruption the special programs caused. The central office responded at the end of the school year by revising the scheduling of all district special classes to be less disruptive.

The changed scheduling policy was attributed to RBS and gave it a broadened legitimacy throughout the state. The district began considering plans to introduce the RBS approach in other schools the next year. The ISA's interest and readiness to commit staff time to disseminating the approach increased. Even the state department of education indicated increased interest in the approach.

Conclusion. Union School illustrates some of the complexities of developing a cooperative relationship with a school. Clearly, the spirit

of cooperation alone was not sufficient. In fact, RBS had to engage in some difficult bargaining to initiate the relationship at all. This bargaining clarified its approach to school change and the limits of what it could do. In particular it could only work on one problem. Essentially, the school had the choice of accepting or rejecting RBS' offer. Once that situation was clarified and the school accepted, cooperation was still not easy. It required considerable program adjustment and technical ingenuity to give individual actors what they wanted while maintaining the integrity of the program. This ingenuity is illustrated by the development of special forms for one teacher as well as the pacing of meetings which allowed teachers to receive unexpected benefits from the district coordinator's wealth of craft knowledge.

This case also illustrates the impact of school context on a change approach. The history of administrator-teacher conflict, the activities of the teachers' association, and the number of special programs in the district all created actual or potential barriers to RBS' initial acceptance. Continuation of the program required that the RBS linking agent successfully navigate the shoals of the strained teacher-administrator relationship in the school.

Overview

The case histories point to a number of issues which warrant further discussion. These issues fall into four categories: (1) the nature of the planning process, (2) the relationship between RBS and the schools, (3) linker behavior, and (4) characteristics of the school context.

First, during planning RBS did not expect that any major changes in school organization would occur. Instead the focus was on characteristics of the planning process itself. Of most concern to RBS at this point was evidence that planning was progressing and that the teams were developing a sense of ownership of the project. The histories suggest that there was a tension between these two desirable characteristics of the change process. It appeared in the form of a conflict between the need to follow a planning approach developed at RBS and the desire to maximize the participation of the school and the team, which in turn would lead to ownership.

The conflict was most evident where a team faced time pressures or had difficulty understanding the approach. At Central the timing of the steps was such that the construction and administration of the needs assessments coincided with one of the busiest times of the school year. Yet the tasks had to be completed before the team could identify the goals to be implemented first. By delegating this work to the coordinator and the linker, the team sacrificed active participation on its part. However, it also avoided a delay of several months in program planning. The team at City was unstable and did not understand the RBS planning sequence. Although RBS staff were highly committed to democratic participation, they were the only people who had the requisite knowledge to guide the process. Thus they had to intervene at points to keep the team "on track." Where they were reluctant to do this, the result was considerable drift and confusion. The tension between rational planning and building ownership

at Union was less. This was largely because the timing of project activities meshed with the ebb and flow of school demands on team members and the team seemed to understand the RBS approach (after the initial difficulty described in the case history).

Second, these cases also suggest that there were substantial difficulties in maintaining a cooperative relationship with a school. None of the three schools was a unified entity. Because each had one or more important internal cleavages, a component had to strike a balance among groups in order to work with a school at all. This was especially clear at Union where the linker initially avoided sharing data with the principal to build trust with teachers. However, the numerous cliques at City seemed to have a significant, if difficult to trace, impact on that team's work; and recruiting teachers at all at Central might have been difficult if they had not been concerned with maintaining a balance of power with administrators.

Third, the component linking agent was the critical actor for navigating the hazards of a particular site and ensuring that the approach was of some use. They were the people who had to mediate between elements of the approaches and conditions at the site. For example, the linker who did all the observation in Union found ways for the RBS process to not look like it was being used for teacher evaluation. At Central the linker adopted a more directive role than the approach called for to get particular tasks completed and had to figure out how to make this role acceptable to staff who were sensitive to any threats to their prerogatives.

Linker behavior seemed critical in another way as well. At each site the linker developed key contacts who helped to coordinate project activities. At Central and City these people were the team coordinators; at Union they were the principal and the district coordinator. Where the contacts were not very influential within the school or did not have the authority to make certain decisions, the linkers had to perform functions they had not anticipated in order to keep the project moving, such as handling the copying of materials or performing planning tasks that could have been delegated to other local team members.

Finally, there were a number of characteristics of the school context that affected the change process. Predominant among these was the motivation of individual actors to engage in the change effort. When individuals sensed that there were problems in a particular area and were interested in correcting them, their participation was usually active and regular. This seemed to be the case with the principal and coordinator at Central, the students and counselors at City, and the district coordinator, principal, and teachers at Union. When individuals did not sense a problem or were interested in a problem different from the one the team was addressing, participation was more problematic, as was the case with the teachers at Central, several teachers and the principal at City, and one teacher at Union.

At least three other school context characteristics bear attention. First, schools' standard operating procedures, especially their schedules and means for getting substitutes, determined the time available for planning. The greatest impact was on teacher and student availability. Second,

schools differed in their familiarity with the concepts RBS used. Planning work seemed to be more time consuming where students who had severe reading problems were involved. Constraints were less extreme but still real where teachers were unfamiliar with research methods or planning techniques. Third, the nature of the problems a school faced and the number of competing change projects affected reception of the approach. Existing projects had a sort of "halo" effect. Distrust or resentment built up by one project transferred to another and created initial barriers that had to be overcome. This was especially clear in City but it seemed to operate at Union as well.

In the next chapter a number of these issues are examined further using data from all 11 sites.

CHAPTER III

THE CROSS-SITE ANALYSIS

The case study format is a useful way to clarify the complexity of the change process and to show how a multitude of factors combined to bring about particular outcomes. However, when searching for patterns among many cases, the details often hide the overall picture. Factors that seem critical at one site are inconsequential at another. A general principle can be vividly illustrated with examples from two or three schools, but it is difficult to identify how it operates in the others. Hence, to complement the case studies, a comparison of all 11 sites was made to examine further how rationality and cooperation affected the change process and what factors contributed to those conditions.

The initial intention was to use the comparison to explore ideas that had been generated by both field work and previous research. Those two sources led to the guiding conceptualization presented above (Fig. 1). Figure 3 shows how the conceptualization was operationalized as a set of variables on which each team could be rated. The arrows in the table indicate changes that were made in the process of operationalization; these will be discussed as the relevant variables are introduced. It should be noted that the initial conceptualization treats process characteristics as mediators between facilitators and outcomes. Because of the number of sites and the exploratory nature of the work, both process characteristics and facilitators were treated as "independent variables"; and exploration was geared toward identifying relationships between those two categories and the interim outcomes.

Figure 3

OPERATIONALIZED CONCEPTUALIZATION

OF CHANGE PROCESS

CATEGORIES	CONCEPTS	VARIABLES RATED
Interim Outcomes	Rationality Quality of Plans (Not available.) Cooperation Sense of Ownership	Rationality Progress Through Steps Cooperation Sense of Ownership
Process Characteristics	Rationality Analysis of School Conditions and Possible Alternatives Cooperation Participation of School Staff	Rationality Cooperation Team-Component Tension
Facilitators	Linker Behavior School Context	Linker Behavior Frequency of Contacts Range of Contacts Number of Functions Performed School Context Central Office Support Principal's Problem-Solving Motivation Teachers' Problem-Solving Motivation

---> = Change in operationalization.

This chapter compares the 11 sites to examine the conceptualization in six sections. First, there is a discussion of the procedures by which sites were rated on the dimensions. The next four sections describe the interim outcomes and their relationships to RBS-school relationship, linker behavior, and school context. The final section is an overview of the cross-site analysis.

The Rating Procedures

The difficult part of rating the sites on the variables was to get accurate ratings of sites and avoid a "halo" effect, i.e., the tendency to rate a team consistently positively or negatively on all dimensions because the team was considered to be good or bad. A three-step procedure was developed. First, Moore et al.'s (1977) procedure for coding data on the teams was adopted. A number of questions were asked of each team. In answering the question, the coder would formulate a synthesis of all relevant data in the school file, record page numbers and the most salient quotes for any one seeking to check the file, and assess the quality of the data on which the synthesis was based. In all, 42 questions were asked of each team. This procedure helped to identify a number of areas where data were inadequate for further analysis.

Second, the rater reviewed all the coding sheets for each school in order to both finalize the dimensions to be used and rate the schools on the dimensions selected. This step included reexamination of the original field notes and discussions with Field Studies staff familiar with the site. Finally, the ratings were checked with component linking agents to

see if they had additional information or perspectives to be taken into account. Once ratings were finalized with component staff, no further adjustments were made.

Interim Process Outcomes

In identifying the outcomes of the change process, an accomodation had to be made to the fact that component approaches and plans encouraged teams to move through the change process at different rates. For instance, two teams actually moved to the implementation stage and began modifying classroom and district procedures. However, as expected, the majority of the teams were still involved with planning activities at the end of the year. Moreover, none of those teams completed their planning tasks so it was not possible to examine some comparable documents, like plans for implementation, across all sites.

Nevertheless, it was possible to identify two interim process outcomes or characteristics that characterized all sites and were relevant to our research problem: ownership and going through the planning steps. A team's sense of ownership of the process, or commitment to the products of that process, is taken to be a prerequisite for successful implementation of a change project. Ownership is generally believed to be enhanced by staff participation and linking agent-school cooperation during planning (see Chapter I).

To get at a team's sense of ownership, raters looked for statements that this is "our" team and evidence that members felt part of what was going on, were willing to work on tasks, and were willing to speak out

on their own concerns. The teams formed by the three components had very different compositions, and initial field work suggested the possibility that members with different positions in a school might feel a very different attachment to planning work. To check that possibility, raters first did separate ratings for the sense of ownership of the professional staff and the principal. These groups were selected because they were prominent on all teams and because it was anticipated that they would be responsible for the bulk of implementation activities. However, in nine of the eleven teams, principals and staff shared a level of ownership. The exceptions were Suburb where the teachers' sense of ownership was low and the principal's was high and Green Hills where the teachers were moderate but the principal was low. Because of the substantial agreement between principal and teachers, one rating of team ownership was created and those two teams were treated as having a moderate sense of ownership.

In all, three teams were identified as having a high sense of ownership: Oldtown, Farmcenter, and Patriot. The Oldtown team, for instance, was very careful not to borrow goals for their project from any external source including RBS or other experts in the field. At Patriot, the teachers and principal exhibited a more diffuse, but strong, sense of interest in the meeting contents. When another school in the district began working through the planning process later in the year and started to catch up with the Patriot team, the principal replied that they were able to "because we got it together for them."

Four teams were classified as moderate in ownership--Neighbortown, Rural District, Green Hills, and Suburb. Reflecting the heavy emphasis

on training in their sessions, the Rural teachers referred to their team as a "workshop." While they had the impression that the large group sessions--there were twelve teachers--were "prepackaged," they enjoyed the opportunity to break into small groups from the same school and discuss interpretations of their data and possible alternatives they could implement. The Neighbortown rating reflected a change over the course of the year. Teachers were quite passive in early meetings, but over time they began to join into discussion more and more.

Finally, four teams were rated low on ownership. These included Urban where one teacher said, "If you can't solve our problems, I won't waste my time" and several members consistently opposed the idea of working in the component's curriculum area. Central, a case history school. was more passive, but distrustful. The team wondered if the linking agent had his own plan that he wanted to adopt. Even after the linking agent's role became more accepted, time constraints limited the team's participation.

The guiding conceptualization suggests that the interim outcome related to rationality should be the quality of the plans the teams developed. However, two components did not take their teams as far as developing plans in the first year.* As a substitute, the decision was made to treat the quality of the process related to rationality as if it were an interim outcome. As suggested in Chapter I, the essence of rational planing is the ability to identify discrepancies between goals and performance

*One component did not intend to take its teams as far as formulating plans in the first year. Another found the tasks of development and within school planning more complex than initially expected, so additional time was required.

and then to identify alternatives to help alleviate those discrepancies. Direct assessment of these abilities proved difficult. However, each component incorporated the tasks of rational planning into its approach and the set of steps it wanted the teams to follow. Each site could be rated on how well its team went through its prescribed steps. Three criteria affected the ratings. The first was the timeliness with which a team went through the steps, whether or not it got bogged down. The second was the team's comprehension of the component approach. The last was its ability to move beyond discussion of form--the component's concepts and jargon--to substance and apply the approach to its own problems.

Five of the teams went through the steps well, five were fair, and only one was poor. Urban, the one poor school, did not really start going through the steps until the next to the last meeting of the year. Earlier meetings were taken up with discussions of whether the component and the team should work on the curriculum area at all, complaints about severe resource deficiencies in the school and the district's administrative procedures, and personal attacks by one or two of the members on others.

By contrast, Union, another case history school, did very well. Its team went through all the steps one time in a way that promoted change of teachers' in-class management practices and the district's policy for scheduling pullout classes. At Oldtown the team was able not only to move through the steps with minimal assistance, but also to adapt previous work to the planning task. This ability reflected the team's understanding of where individual tasks fit into the overall project. For example, the

component provided teams with lists of goals compiled from a variety of sources to help the teams identify goals for their particular sites. The ultimate purpose of this task was to select goals which addressed local problems. For most teams this task was time-consuming because it required the teams to understand the RBS-provided goals and then translate them into terms relevant to their schools. However, the Oldtown team realized that the school already had a list of goals which had been developed in response to a state program and that these goals would serve as better starting points because they were devised specifically for Oldtown. As the team coordinator put it, "Why should we come up with a set of goals that's different from those already established by the school....In doing our job all we have to do is select those goals which relate to the curriculum area." Thus, the team was able to move quickly through this step and at the same time create materials well-suited to the school.

Table 1 shows a strong positive relationship between the team's sense of ownership of the process and how well it went through the steps. Most of the schools fell on or below the Good-High to Poor-Low diagonal. The most extreme off-diagonal cells were empty which indicates that there are no major outliers or exceptions.

The qualitative data indicated that there was no clearly-cut order of precedence between the two interim outcomes. The idea behind rationality was that going through the steps would produce a plan well-suited to local conditions and that a team would likely develop a high sense of commitment to that plan. This ideal was born out at Farmcenter, Neighbortown, and Patriot. As these teams planned, the relevance of the plans to

TABLE 1

COMPARISON OF INTERIM PROCESS OUTCOMES

Progress Through the Steps

Ownership	P	F	G	
H			Fa Ol Pa (3)	(3)
M		Su Gr (2)	Ne Ru (2)	(4)
L	Ur (1)	Ri Bi Mi (3)	(4)	
	(1)	(5)	(5)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

* P = Poor, F = Fair, G = Good. H = High, M = Medium, L = Low. This convention will be repeated on subsequent tables.

their problems became increasingly apparent; concomitantly, a sense of ownership grew. However, how a team went through the steps did not always precede a particular level of ownership. For example, at Oldtown where the team demonstrated a high level of ownership early in the project, planning proceeded much more smoothly than it did at Central and Urban where there was little commitment at the outset.

The data from two of the case history sites, Central and City, suggested that there was not always a reciprocal relationship between the two variables. In fact, a tension arose which seemed to make it necessary to sacrifice the attaining of one desirable outcome in favor of another. The tension became manifested where a team did not have the time to perform necessary tasks or did not understand the tasks well enough to see the logic in performing all of them. In the first instance, the response to the tension was the assumption of more responsibility by the linker and a subset of the team; in the second, the response was the team's somewhat mechanical adherence to the steps under the guidance of component staff. In both cases getting through the steps was done at the expense of local ownership.

What seemed to happen generally was that ownership and going through the steps were mutually reinforcing but only in situations where a linker was able to maintain a balance between local control and the team's conformity to technically sound planning steps. Such was the case at Rural where the linker gained the team's compliance with the component's data collection procedures by having suggestions for changes in procedures

incorporated into the steps followed. Similarly, the Union case study suggests that progress through the steps was facilitated by the linker's willingness to allow sharing of craft knowledge that seemed extraneous to to the component's process but that was appreciated by teachers on the team. The art of the linker's task seems to be managing progress through technical planning activities in a way that is responsive to team concerns. In responding to those concerns, however, the linker may be constrained by other factors. The case histories showed that balancing technical and participatory concerns was more problematic when a team had little time available or did not understand what was required of it.

Process Characteristics: Cooperative Relationships

Participation or, in the linking agent-school relationship, a cooperative relationship is believed to facilitate change primarily by increasing lower participants' sense of ownership of the process. The operating mechasism is supposed to be "power-equalization" (Leavitt, 1965). The idea is that if decisions are made by top managers or outsider experts, teachers will not feel committed enough to project results to work for them. If teachers can really affect decisions, they will see their own ideas in the project and be more strongly committed to it. More recently, another kind of argument has been advanced for participation. Sayles (1979) suggests that those who will be most directly involved in implementing a project will have unique information on potential barriers to implementation and useful ideas on how to modify procedures to make

them more effective. Power equalization facilitates such information sharing since it reduces the likelihood that teachers will be sanctioned for providing information about negative aspects of the situation.

These considerations suggested that the issue of cooperative relationships could be treated as one of balance of control. Presumably, if control was equally distributed or rested with school personnel, they would be more committed to the project. Moreover, a balance of control would permit freer flow of information which would help a team move through the steps. Consequently, the problem the linking agent faced was to elicit participation, and that could be done by sharing power.

The first year's research suggested that this kind of thinking was a misapplication of ideas based on intra-organizational change processes where the barrier to power equalization is the formal distribution of authority. These ideas confused analysis of what was basically an inter-organizational relationship. What structured the relationship between the linking agent and the school was not an organizational chart but an agreement between two parties. This agreement was implicit rather than contractual since the only paper signed was an informed consent statement which pertained primarily to confidentiality of data collected.

To simplify somewhat, the agreements consisted of three parts. Only the first part was made explicit. It was a set of items that each component considered non-negotiable. These items constituted the least common denominator of each component's approach and the expectation that the school would adhere fairly faithfully to that approach so the component could pilot its procedures. The core items included the content

area in which the component would work, the establishment of a team including representatives of all groups identified by the component, and an understanding that the team would follow the steps developed by the component. There were other areas as well--one component included the general outline of its instrument and some use of its reference materials in the core--but these other requirements varied more among components.

It was tempting to suggest that the second part of the agreement was the core non-negotiable items of the school or team and that these related to what the team hoped to gain from the process. Generally, however, the school's outline of the school's core concerns was difficult to discern. It tended to reflect established norms and standard operating procedures rather than special interests. For instance, in Riverside, the component wanted to use some of the teacher in-service time available from the central office for its meetings so staff could attend without additional expense for substitutes. However, the in-service calendar had been set at the beginning of the school year to cover all schools in the district. It could not be modified in the winter to meet the needs of one school.

In between these two cores was a third area--a periphery where a negotiated settlement was possible. This periphery included decisions about the exact make-up of the school improvement team, the timing of working through the steps, the logistics of data collection as required by the steps, and the actual substance of the program developed by each school including both goals and procedures.

Identification of an area of core concerns for the component does not mean that it was dictating to the school. The periphery covered a wide range of decisions, some of which--like those related to project design--were fundamental. The schools had considerable discretion in their dealings with the component. Moreover, the schools also had a choice with respect to the component's core, but it was an all-or-nothing choice. The components identified their core concerns when they initially recruited sites. In effect the school accepted the core as given while it worked with the component.

This negotiation of the component's core concerns was quite explicit at Union School. There the component invited the school to work with the component in developing its approach. When the superintendent asked for help in working with the state on its pull-out problem, the component suggested that what it could really do was provide data that would indicate how bad the situation really was. Then teachers asked if the component would look for articles for them, the response was that the component provided research through its reference materials and instruments. Finally, when pressure was applied to have a choice in curriculum problems to address, the component indicated that it was only possible to work on one that year. The school had the choice of taking the component's offer in hopes that it would be of assistance to them or refusing it. Eventually, it accepted. Another school in the same district chose to decline the same offer.

It seems that the examination of the school-component relationship should be guided by a market analogy rather than one taken from the hierarchy of authority in an organization. This analogy suggests that power is concentrated with the party least dependent on the relationship. The implication is that schools at least have the opportunity to dominate such a relationship because their dependence is relatively low. Very simply, each school has a large number of sources of assistance from which to choose, and--as will become clear below--it often has no strong urge to seek help. While the component also has a choice, it is operating under a set of constraints. For instance, during site selection activities, each component had a deadline for finding schools and starting teams. One component only gave itself a month although it did not make that target. Even so, the existence of deadlines often limited the choice each component had (Firestone, 1979b). Once agreements were reached, the loss of a school would have put a component behind schedule in its development work.

Depicting the agreement between component and school as two cores of non-negotiable items surrounded by a periphery where negotiation was possible is something of an oversimplification. Neither side was completely clear about what it expected from the relationship. The components were limited because they were still developing their approaches. For instance, one component apparently decided what steps to work through after sites were selected and even after it wrote its general manual for site use. Similarly, another component determined that it could only work

with one curriculum problem its first year because the instrument and reference material development process was more complicated than had been anticipated. However, this decision was made between the time the component talked to administrators for the Union school and district and the presentation to teachers which led to an important shift in the presentation during the negotiation process. In addition, the components learned from experience. One initially expected that teachers would do their own observing to measure how they were meeting particular goals. When that proved impossible, it arranged to have administrators or its own staff observe. What might have seemed non-negotiable became flexible when unexpected contingencies arose.

The schools' core concerns were ambiguous because school staff made no systematic attempt to clarify them. Hence, a school's non-negotiable items were identified through a process of discovery. A component did not know what constituted a core concern until it made a mistake or when concrete planning for activities began. These concerns varied considerably. They included:

1. District standard operating procedures. In Riverside it was impossible to use teacher in-service days for team meetings and difficult to arrange release time for students on the team. In Patriot, it was difficult to get substitute teachers.

2. The interests of specific individuals and groups. In Union school one individual insisted on special adjustments in the approach. In Rural District, a administrator wanted teachers' time demands reduced. In Urban, one teacher used the team to express his grievances at the administration's failure to promote him.

3. Community demographics. One component had to take into account the multi-racial character of Urban and its bussing program. The ease with which high school students could get jobs at Neighbortown and the tourist business at Oldtown created concerns to which another component had to respond.

As these examples indicate, only the general outlines of each party's core concerns were outlined in initial negotiations. Other concerns were identified as time passed. Then, if the concern could not be reconciled, the component-school relationship was characterized by some degree of tension. This tension continued until the issue was resolved or the school year ended. The absence of tension does not indicate the absence of core concerns. Rather it indicates either that core concerns were quickly resolved as they arose or that no difficulty to resolve issues arose in the time span observed.

These considerations suggested that attention should be shifted from the balance of control to the existence of tension--i.e., the existence of a condition of stress, distrust, or hostility in the relationship between RBS and the teams. Extreme tension could and did lead to periods of confrontation or conflict between RBS and a team. Field work suggested that tension signified that some impasse had taken place. Until the tension-provoking issue was resolved, it seemed that little progress could be made in going through the steps and school participants would withhold commitment pending assurance that their interests would be met. In the extreme, because the component and team operated in a market situation,

failure to resolve the tension-causing issues could lead to the termination of the relationship.*

In several schools, the level of tension shifted over the year. For instance, negotiations in Union were characterized by moderate tension when school staff thought the terms of the agreement had shifted. Once they understood the agreement and the school joined the program, tension disappeared. In Rural District tension arose in early planning meetings after the agreement had been reached. An administrator objected to the amount of time that the linker wanted to train teachers and administrators in the approach. Part of the objection was based on an overlap between the RBS project and other training going on in the district which covered similar material. Once differences between projects in the district were clarified and the component agreed to some adjustment, positive relations were resumed. On the other hand, tension was low in Middleburg until near the end of the school year when the principal realized that data collected on teachers was being interpreted to suggest changes in the school that the individual was unwilling to make. This tension was not resolved at the end of the school year.

In other teams, the level of tension was essentially constant throughout the year. Tension ratings at the end of the year show that there was

*Thinking on this point is shaped by Hirschman's (1970) work on Exit, Voice, and Loyalty. His work suggests that in market situations, tension can be resolved by dissolving the relationship; the sources of tension must be removed to continue work. By contrast in situations where individuals are constrained from leaving, such as those arising within organizations, prolonged conflict will take place. Such conflict may lead to resolution or exhaustion or simply no termination.

only one high case. At Urban some team members continued to attack the relevance of the component's work for the school until the end of the year. At that school it seems that a basic agreement was never really worked out. Five schools were characterized as having moderate tension. For instance, there seemed to be a constant level of reserve and distrust at Central. There tension was most apparent when the linker violated the terms of the agreement established by strongly suggesting what the content of the program should be. Teachers objected, and the linker acknowledged the limits of the role's entitlement at the next meeting, thereby clarifying the situation. At Riverside, there seemed to be a constant level of distrust which, according to one of the RBS people working in the school, reflected local conditions more than any actions on the component's part. In the five remaining schools, tension was essentially non-existent.

Table 2 shows the relationships between component-team tension at the end of the year and the two interim dimensions. Both relationships were fairly clear and negative. There was a simple linear relationship between tension and progress through the steps. The only off-diagonal school was Green Hills which only scored fair in spite of low tension. The relationship between tension and ownership did not appear to be a simple linear one. Rather the existence of tension seemed to encourage team members to withhold commitment until the issue was resolved. Where there was any tension, ownership was low; and where there was no tension, some degree of ownership existed. The only exception was Suburb where,

TABLE 2

TENSION AND INTERIM OUTCOMES

A. Tension and Progress Through the Steps

Progress Through the Steps

Component-Team Tension	P	F	G	
H	Ur (1)			(1)
M		Su Bi Ri Mi (4)		(4)
L		Gr (1)	Ru Pa Ne Fa Ol (5)	(6)
	(1)	(5)	(5)	

B. Tension and Ownership

Ownership

Component-Team Tension	L	M	H	
H	Ur (1)			(1)
M	Ri Bi Mi (3)	Su (1)		(4)
L		Ne Gr Ru (3)	Fa Ol Pa (3)	(6)
	(4)	(4)	(3)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

it will be recalled, the teachers' sense of ownership was low but the principal's was high.

Facilitators: Linker Behavior

Increasing attention has been given to the functions which linking agents perform in disseminating information and bringing about organizational change (Butler & Paisley, 1978; Hood & Cates, 1978; Louis, 1977). According to Louis and Sieber, the major purpose of these agents is "to serve as the vital link between research and practice" (1979, p.9). The RBS components emphasized a similar purpose for their site specialists who were to provide a link between knowledge about planning (and about the curriculum areas) and the sites' development of new programs. However, there seemed to be one major difference between the work of linking agents described in the literature and that of the RBS linkers.* The majority of linker studies elsewhere apparently had few formal constraints placed on the type of linkage they developed with clients other than that they were to provide technical assistance (e.g., the educational extension agents in Louis & Sieber, 1979); whereas, the RBS linkers had several limitations placed on how they were to work with clients. For example, RBS staff had job responsibilities other than site work, which decreased the time available for serving clients; the component approaches partially defined the relationship linkers were to have with clients (e.g., the content of services and the type of leadership to be provided); and the approaches were explained to clients which helped narrow clients' expectations for how linkers were to behave.

*As noted elsewhere in this report, not all RBS staff viewed themselves as linking agents. However, according to Louis and Sieber's definition, this term most accurately describes the functions they performed, and its usage greatly simplifies the prose.

For these reasons it was possible that the behavior of RBS staff did not vary enough among the sites to serve as explanations for the variance observed in ownership and going through the steps. However, the case histories suggested that linker behavior was a critical factor, and the kind of relationship the linker established with a site seemed particularly important. In order to see if linking activities were related to project outcomes, three aspects of how the linkers interacted with the sites were examined: (1) the frequency of contact with a site, (2) the range of site staff contacted, and (3) the number of functions linkers performed at a site.

An initial problem was to identify the linker to whom the variables applied. The linker could have been conceived as a component, an individual site specialist, or both. Because each component assigned a specific individual to be the person primarily responsible for working with a site and because conventionally the term "linker" has referred to an individual rather than an organization or an organizational sub-unit, the component site specialist was considered to be the linker. However, additional component staff also provided services to the sites, either directly or indirectly through development work at RBS. Thus, the linkages both between a site and a linker and between a site and a component as a whole were examined.

Frequency of Contact

Frequency of linker contact with a site was defined as the number of actual visits a linker made to a site. The number of visits varied from

a low of four to a high of greater than 20. Frequency of contact was rated as low if the number of visits was ten or less and as high if the number was greater than ten. Five sites were rated low, and six were rated high.

Component contact was the percentage of site visits in which component staff other than the linker were also present. If other staff accompanied the linker less than 50 percent of the time, component contact was considered to be low; otherwise component contact was high. The frequency of component contact was low at five sites and high at six.

It was possible for the two contact measures to vary independently. That is, a linker could have visited a site only a few times and have been accompanied by other component staff each time. In this case linker contact would have been low and component contact high. Likewise, a linker could have visited a site many times and only infrequently have been joined by other component staff, in which case the reverse would be true.

In fact, the data showed that there were no mixed cases; sites were characterized by either low contact with a linker and a component or high contact with both. For this reason the two contact measures were collapsed into a single measure for analysis.

All of one component's sites were low contact sites, and all of another component's sites were high contact sites. The third component had one low and two high sites. Thus, this variable reflected mostly across, rather than within, component differences.

Table 3 Indicates that there was no relationship between frequency of contact and either interim outcome. This lack of a relationship was

TABLE 3

FREQUENCY OF CONTACT AND INTERIM OUTCOMES

A. Frequency of Contact and Ownership

Frequency of Contact	Ownership: L	Ownership: M	Ownership: H	
H	Ri, Ur (2)	Su, Ru (2)	Fa, Pa (2)	(6)
L	Bi, Mi (2)	Ne, Gr (2)	Ol (1)	(5)
	(4)	(4)	(3)	

B. Frequency of Contact and Progress Through the Steps

Frequency of Contact	Progress Through the Steps: P	Progress Through the Steps: F	Progress Through the Steps: G	
H	Ur (1)	Ri, Su (2)	Fa, Pa, Ru (3)	(6)
L		Gr, Bi, Mi (3)	Ne, Ol (2)	(5)
	(1)	(5)	(5)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

not taken to mean that frequency of contact was not important; rather, it suggested that the variable may have operated differently from one site to another. For example, the qualitative data showed that the high frequency of contact at Urban was largely a component response to unstable conditions at the site, including low team commitment to the project. On the other hand, at Patriot much interaction between the school and RBS was necessary to negotiate an initial understanding, which then paved the way for planning to progress and for local ownership to develop. Thus, in the first instance, high contact was largely a consequence of school-related factors; in the second it was a precursor of later developments.

Range of Contact

In addition to the frequency of contact with the sites, the linker had the opportunity to manage the range of contacts, i.e., the number of different people or positions in the school district involved in the process. By broadening the range of contacts, linkers could increase the amount of staff participation in planning. Although past research is ambiguous, the belief that participation increases a sense of ownership is frequently repeated. (See Chapter I.) Examination of range of contact provided an opportunity to assess the contribution that an outside linker could make to internal participation.

At all project sites linkers and other component staff met with school improvement teams. In addition, linkers met with a smaller group of individuals or with a single individual to plan the team meetings. Thus, participants were involved at two levels: doing project tasks and

helping to decide what and how project tasks would be done. For this reason the range of site staff contacted had to be defined at both levels. Because it was largely the responsibility of the linker to work with the people who helped set meeting agendas linker range of contact was defined as the number of positions represented in this group. Because the planning team was the focus of the components' efforts, component range of contact was defined as the number of positions represented on the team.

The set of possible positions to be included in either group was student, teacher, guidance counselor, building-level administrator, district-level administrator, community representative, and other. The number of positions was used as a measure because the literature on using teams of internal change agents in the change process suggests that such teams can promote the acceptance of an innovation in a school district (e.g., Goodsan, Hugstram, 1971). Thus, by increasing the participation of site staff from different levels in the system, it was likely that the linker could at least partially influence the degree to which a project was successful.

The variance in each range of contact measures was small. Linkers planned meetings with incumbents of one, two, or three positions. One was rated low; two and three were rated high. There were six lows and five highs. The number of positions on the planning teams ranged from three to seven. Three and four were considered low; five, six, and seven were high. For this measure there were seven highs and four lows.

Table 4A shows an almost perfect inverse relationship between the two measures. The only exception was Farmcenter where the rating for each

TABLE 4

RANGE OF CONTACT AND INTERIM OUTCOMES

A. Comparison of Linker and Component Measures

Linker Range of Contact

Component Range of Contact	L	H	
H	Ri Ne Ol Ur Gr Bi (6)	Fa (1)	(7)
L		Pa Ru Mi Su (4)	(4)
	(6)	(5)	

B. Linker Range of Contact and Ownership

Ownership

Linker Range of Contact	L	M	H	
H	Mi (1)	Ru Su (2)	Fa Pa (2)	(5)
L	Ri Bi Ur (3)	Ne Gr (2)	Ol (1)	(6)
	(4)	(4)	(3)	

C. Linker Range of Contact and Progress Through the Steps

Progress Through the Steps

Linker Range of Contact	P	F	G	
H		Mi Su (2)	Fa Ru Pa (3)	(5)
L	Ur (1)	Ri Bi Gr (3)	Ne Ol (2)	(6)
	(1)	(5)	(5)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

variable was high. As was the case with frequency of contact, this finding largely reflected across component differences because only one component contained both lows and highs.

No relationship was found between the component range of contact and either of the interim outcomes. Although there seemed to be vary weak positive relationships between the linker range of contact and the two outcomes (Tables 4B and 4C), generally the inclusion of individuals from a variety of positions within a school system did little to facilitate planning or to create a sense that a project belonged to the district. One interpretation of this finding was that broad participation, at least as measured by the range of positions contacted, was not a critical link in the change process. A second interpretation was suggested in the case history, and that was that the positions key contacts in the school occupied was less important than the amount of influence they had. The degree to which the projects at the case history schools moved smoothly partially depended upon the ability of these individuals to command resources or to elicit participation from site staff. In some of the other sites it may have been that even though the teams included incumbents from positions to which considerable formal authority was attached (e.g., department chairpersons, building administrators, or district supervisors), the individuals did not possess the actual influence necessary to overcome barriers encountered during planning. In this way progress could have been impeded even when a team had representation from a wide range of positions. Moreover, the presence of members holding upper-level positions in the school system could have stifled the participation of lower participants who may

not have been optimistic about successfully implanting any decisions which were contrary to what their superiors favored. If this were the case, then power-equalization may not have operated as Leavitt (1965) hypothesized in cases where representation on the team was not tantamount to actual participation in decision-making.*

Number of Functions

The primary linking function that RBS staff performed was providing help with new program planning. This was in accordance with the component approached which, as was noted in Chapter I, defined the linkers as technical process-helpers. However, at some sites linkers performed additional tasks as well. For example, at Patriot the linker not only helped to guide the team through the component's steps but also worked to develop good interpersonal relationships among team members and shared specialized knowledge from the curriculum area. At Bigtown the linker assisted the district in writing a proposal to obtain outside funds. Thus, linkers functioned as facilitators of interpersonal relations, technical assistance consultants, and problem-solvers in addition to being process-helpers.

If a linker performed a single function at a site, the individual was rated as low on this variable; if a linker mostly performed a single function but occasionally performed several others, the linker was rated as medium; if a linker clearly performed several functions at a site and allocated considerable time to each, the linker was considered to be high. The ratings yielded three linkers who were high, four who were low, and four who were somewhere in between. This finding indicated that some

*Subsequent research has had a strong emphasis on mapping the social relationships among actors at the sites. The data from this effort promise to inform further the above speculations.

linkers found it necessary to stray somewhat from the process-helping role defined for them in the component approaches.

The same continuum was applied to component staff. For a component to be rated as low, no component staff member other than the linker could have performed more than one function for a site. For example, at Green Hills other component staff only visited the site to provide technical expertise for a specific task. For a component to be rated as high, at least one component staff member other than the linker had to perform multiple functions on site. This occurred at Riverside where another component staff member became involved in building team relationships in addition to providing technical assistance. The component rating yielded three sites where component staff were high and eight sites where component staff were low.

The variance in this variable was not great enough to expect it to be useful in subsequent analysis. The lack of variance was not suprising in light of the way in which other component staff were used by linkers. When a linker encountered a problem beyond his or her expertise or when additional technical skills were needed at a particular point in planning, the linker brought in help from the components. Component staff rarely had the opportunity to interact with site staff for any reason other than the one they were asked to address. The exceptions were Rural District, Urban, and Riverside.

No relationship existed between the component measure and the two interim outcomes. Nor was there a relationship between the number of

functions an individual linker performed and how well a site went through the steps (Table 5A). However, Table 5B shows a weak negative relationship between the linker measure and ownership. This suggested that ownership was higher where linkers performed less of a variety of functions.

There were at least two possible interpretations of this latter finding. One, because the linker performed few functions at the site, the planning team had more responsibilities. Then, as a result of carrying out these responsibilities, the team began to feel that the project belonged to them rather than to RBS. Conversely, if a linker adopted a broader definition of his or her role, a team was left with few responsibilities. This decreased opportunity to participate then could have led to a lower sense of ownership. Two, the finding could have been the result of a linker response to site conditions. In other words, at those sites where the team participated actively from the beginning and thus quickly developed a sense of ownership, there was no need for the linker to behave other than as a facilitator of planning; at the sites where the team did not participate so readily and did not demonstrate a sense of ownership, the linker had to broaden the enactment of the linking role in order to move the site through the steps on schedule.

The qualitative data favored the latter interpretation. For example, at Oldtown the team quickly accepted the idea that the project belonged to them. Team members refused to rely on the linker even when the team became bogged down over a particular issue. In response to one member's solicitation of the linker's help, another member said "No, this is up

TABLE 5

NUMBER OF FUNCTIONS AND INTERIM OUTCOMES

A. Number of Linker Functions and Progress Through the Steps

Progress Through the Steps

Number of Linker Functions	P	F	G	
H		Su (1)	Fa Ol (2)	(3)
M	Ur (1)	Ri Gr (2)	Ru (1)	(4)
L		Mi Bi (2)	Pa Ne (2)	(4)
	(1)	(5)	(5)	

B. Number of Linker Functions and Ownership

Ownership

Number of Linker Functions	L	M	H	
H	Bi Mi (2)	Ne (1)	Pa (1)	(3)
M	Ri Ur (2)	Gr Ru (2)		(4)
L		Su (1)	Fa Ol (2)	(4)
	(4)	(4)	(3)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

to us." Consequently the linker performed only the process-helping tasks originally indicated to the team: making materials available to the team and introducing the steps of the process. On the other hand, at Central the team was more willing to approve what others had done than to perform tasks themselves. As a result the linker actually did a large portion of the planning.

Relationship between Component and Linker Behavior

The component approaches seemed to structure linker behavior for the most part. For example, the linkers' frequency of contact and range of contact varied more across components than within components. Only the number of functions linkers performed varied irrespective of the components. However, this suggested that although linkers had little discretion in some areas, they had to adapt to different conditions once at the sites. As was seen in the case histories, the linker was the critical person for making the approaches useable at the sites. This necessitated not only adjusting the approaches but also changing the kinds of activities the linker performed. Because different school contexts required some linkers to perform many functions and others only a few, no strong relationships were found between this aspect of linker behavior and the interim outcomes. However, it may have been that had linkers not made such adjustments, the continuance of the projects would have been jeopardized.

Facilitators: Contextual Factors

A variety of survey and qualitative data indicate that the context in which a change takes place has at least as great an impact on the change process as the specific strategies employed (Berman and Mclaughlin, 1977; Herriott and Gross, 1979). While a fuller analysis of the contribution of school contexts to the use of RBS' approaches awaits analysis of survey data and additional field work in schools, some clues are available from observation of the first year's work. This observation suggested that special attention should be paid to the support deriving from the central office and to the motivations of team members.

Central Office Support

The central office was important to initial planning work for a number of reasons. First, it usually served as a gatekeeper. Typically, the component would make its initial request and presentation at that level, often directly to the superintendent. Central office personnel could end the recruitment process at that poin.. If further exploration took place, the central office often selected the school with which the component worked or at least limited the choice. Second, the central office controlled critical resources. Teachers were unwilling to participate in the program after school without compensation, and RBS was unwilling to pay for their time. The only way to form a team was to take time during the school day or during staff in-service days. While the former procedure was more typical, either way required a commitment on the district's part to pay for substitute teachers or to forego other training. Finally, the district was an important source of endorsement.

Component staff were almost always strangers to a school, and the principal and teachers often did not initially understand what could be expected of participation in the program. Under these conditions, central office endorsement helped to show not only that participation would not be punished but also to give staff some initial faith that the approach might "pay off."

In rating schools, most attention was paid to the kind of endorsement the central office provided rather than resources provided. There was only one instance where paying more attention to resource provision would have suggested a modification of a rating. Urban had the only central office that was rated low on support. Field researchers' observations and the linker's comments suggested that the central office's role was non-supportive. Although permission was granted to allow the component to approach this school--and in fact it was suggested because of its racial tension--the central office did nothing to endorse the project at the beginning or later. Yet, unlike Riverside and Suburb (two other teams from the component that were rated as moderate) the Urban central office did provide money for substitutes.

In all, one school was rated as having low central office support. For five support was moderate, and in another five it was high. A high rating was given when central office representatives gave the project initial endorsement, attended most meetings, and continued to indicate active support for it. For instance, the Rural superintendent attended all but one of the RBS meetings in the district. To persuade principals to do the observation required by the component approach, the superintendent

volunteered to do some. To build teacher support for the project, administrators were told, "I want people to get the 'invented here' message across real strong, and I want to act as if it's our program." Later, the superintendent told teachers, "This is a continuation of our curriculum development process and our personnel appraisal process." A moderate rating was given when the central office gave an initial endorsement but little follow-up. For instance, the central office contact for the Riverside school told administrators that the individual wanted RBS in the school and made some follow-up telephone calls to the component linker to ascertain progress on the effort; however, the contact never attended meetings at the school.

Table 6 shows the relationships between central office support and the two interim outcomes. The relationship between central office support and progress through the steps was extremely strong and positive. There were no off-diagonal schools at all. The relationship with ownership was also strong, although not perfect. While there were no schools in the extreme off-diagonal corners, several schools fell above the diagonal indicating that teams maintained reservations in spite of central office support.

Problem-Solving Motivation

Several recent studies indicate that the motivations of individuals and groups to take part in a project can have important consequences for the change process. For instance, Greenwood, Mann, and McLaughlin (1975) distinguish between opportunistic and problem-solving motivations. The opportunistic projects were a response to available federal funds so

TABLE 6

CENTRAL OFFICE SUPPORT AND INTERIM OUTCOMES

A. Central Office Support and Progress Through the Steps

Progress Through the Steps

Central Office Support	P	F	G	
H			Fa Pa Ol Ru Ne (5)	(5)
M		Su Ri Gr Bi Mi (5)		(5)
L	Ur (1)			(1)
	(1)	(5)	(5)	

B. Central Office Support and Ownership

Ownership

Central Office Support	L	M	H	
H		Ru Ne (2)	Fa Pa Ol (3)	(5)
M	Ri Bi Mi (3)	Su Gr (2)		(5)
L	Ur (1)			(1)
	(4)	(4)	(3)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

little serious change was attempted or occurred. The problem-solving projects emerged from locally identified needs; they led to projects that often broke new ground in educational practice for a school. Firestone (1979a) describes a single project where teachers and administrators had very different ideas about what changes were needed. While the administrators were able to control the outcomes of planning, the project had been transformed to reflect teachers' ideas after two years of implementation. Finally, Daft and Becker (1978) argue that most innovations are adopted by "idea champions" who see the need for a specific practice within their own area of responsibility.

Observation of the components' recruitment activities suggested that opportunistic and problem-solving motivations could vary separately. Sometimes a district could be both at once (Firestone, 1979a). For instance, the Rural superintendent was definitely interested in raising test scores throughout the district, a concern that was reinforced by new families moving into the district who were disappointed with its past performance. However, the district was actively seeking support from four programs in a number of areas. It had also won an ESAA desegregation grant.

As a first approximation, attention was focused on the level of the team's problem-solving motivation and not on the extent of opportunism. However, since past research indicated that different groups might see different problems, the motivations of the principal and teachers were examined separately in each team.

High motivation was defined as a situation where the individual or group was strongly enough motivated to participate in the project because of concern about the substantive issue involved. For instance, the Farmcenter principal indicated a strong interest in the component's curriculum area and reported that the school's parents were similarly concerned. The motivation stemmed from either an intrinsic interest in the subject matter or some problem plaguing the school that team members thought the component's approach would solve. The Union teachers' concern over pullout scheduling was such a problem.

Moderate problem-solving motivation was a situation where the individual or group was amenable to the approach, but needed some additional impetus to take part. For instance, the teachers in Neighbortown were concerned about students dropping out of school early to find jobs, but they did not evidence the degree of concern in Union. In some instances, a moderate rating was given where someone had some sense of a problem, but the actual problem seemed unclear. For instance, the Suburb principal described several concerns at different times including an interest in developing the kind of skills that the component was fostering, a concern to strengthen the school's curriculum, and an interest in using the component's approach to help define school goals as required by the state's school improvement program.

Low problem-solving motivation encompassed both passive acceptance--as in the case of the Riverside principal who was the only principal who did not attend team meetings--and active opposition. This latter condition

was found only among teachers in Urban where several thought that it was more important to have an adequate heating system to get the school through the winter than to develop a new project. These teachers repeatedly opposed the whole effort.

Table 7 shows a simultaneous plotting of the motivations of teachers and principals. It indicates that the motivations of the two groups should be treated separately. While the principal and teachers were rated the same in seven schools, there were four exceptions. Three of these were in the extreme off-diagonal cells which suggested there was no relationship among the variables at all.

Because teachers and principals seemed to develop their own sense of what constituted a problem, the relationships between the two groups' problem-solving motivations and the interim outcomes were examined separately. Table 8 presents the plots for teachers. This factor was positively related to progress through the steps. While there were numerous off-diagonal schools, none of them fell into the extreme corners. If anything the relationship between teachers' problem-solving motivation and ownership of the process was even clearer. Only two of the schools fell off the diagonal. The greatest exception was Riverside where ownership was low in spite of a strong initial sense of a problem among teachers. The situation at Riverside may have been a reflection of the large number of students on the team there. Because there were more students than adults, the linker encouraged teachers to act as discussion leaders rather than participants. Although teachers were strongly motivated, their training

TABLE 7

PROBLEM-SOLVING MOTIVATION OF PRINCIPAL AND TEACHERS

Principal \ Teachers	L	M	H	
H	Ur Bi (2)		Fa Ol Pa (3)	(5)
M	Mi (1)	Su Ne Ru (3)		(4)
L	Gr (1)		Ri (1)	(2)
	(4)	(3)	(4)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

TABLE 8

TEACHERS' PROBLEM-SOLVING MOTIVATION AND INTERIM OUTCOMES

A. Teachers' Problem-Solving Motivation and Progress Through the Steps

Progress Through the Steps

Teachers' Problem-Solving Motivation	P	F	G	
H		Ri (1)	Pa Fa Ol (3)	(4)
M		Su (1)	Ru Ne (2)	(3)
L	Ur (1)	Gr Mi Bi (3)		(4)
	(1)	(5)	(5)	

B. Teachers' Problem-Solving Motivation and Ownership

Ownership

Teachers' Problem-Solving Motivation	L	M	H	
H	Ri (1)		Pa Fa Ol (3)	(4)
M		Re Su Ne (3)		(3)
L	Mi Ur Bi (3)	Gr (1)		(4)
	(4)	(4)	(3)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

role probably reduced their sense of commitment to the activity as opposed to one where they made decisions.

Table 9 presents the results for the principals' problem-solving motivation. These relationships were much weaker. There seemed to be a weak relationship between the principal's motivation and progress through the steps. If an interpretation could be drawn from this table, it was that the principal's concern facilitated the process; but the position of Urban suggested that the principal may have not been able to overcome adamant teacher opposition. The relationship with ownership was even more tenuous. While there were seven schools on the diagonal for a positive relationship, there were four exceptions including two in one extreme corner.

The differences between Tables 8 and 9 were attributed to four schools: Urban, Middletown, and Bigtown where the principals' sense of a problem was stronger than the teachers' and Riverside where the reverse was true. It was tempting to suggest that in the absence of agreement there was a problem , i.e., the concern of one group could not easily overcome the lassitude of the other. This interpretation was suggested graphically by moving the position of Riverside on Table 8 to reflect the low sense of a problem by the principal rather than the strong sense among the professional staff.

TABLE 9

PRINCIPALS' PROBLEM-SOLVING MOTIVATION AND INTERIM OUTCOMES

A. Principals' Problem-Solving Motivation and Progress Through the Steps

Progress Through the Steps

Principals' Problem-Solving Motivation	P	F	G	
H	Ur (1)	Bi (1)	Pa Fa Ol (3)	(5)
M		Su Mi (2)	Ne Ru (2)	(4)
L		Ri Gr (2)		(2)
	(1)	(5)	(5)	

B. Principal's Problem-Solving Motivation and Ownership

Ownership

Principals' Problem-Solving Motivation	L	M	H	
H	Bi Ur (2)		Pa Fa Ol (3)	(5)
M	Mi (1)	Ru Su Ne (3)		(4)
L	Ri (1)	Gr (1)		(2)
	(4)	(4)	(3)	

Pa = Patriot, Mi = Middleburg, Ru = Rural District, Fa = Farmcenter, Ur = Urban, Ri = Riverside, Su = Suburb, Ne = Neighbortown, Gr = Green Hills, Bi = Bigtown, Ol = Oldtown.

Overview

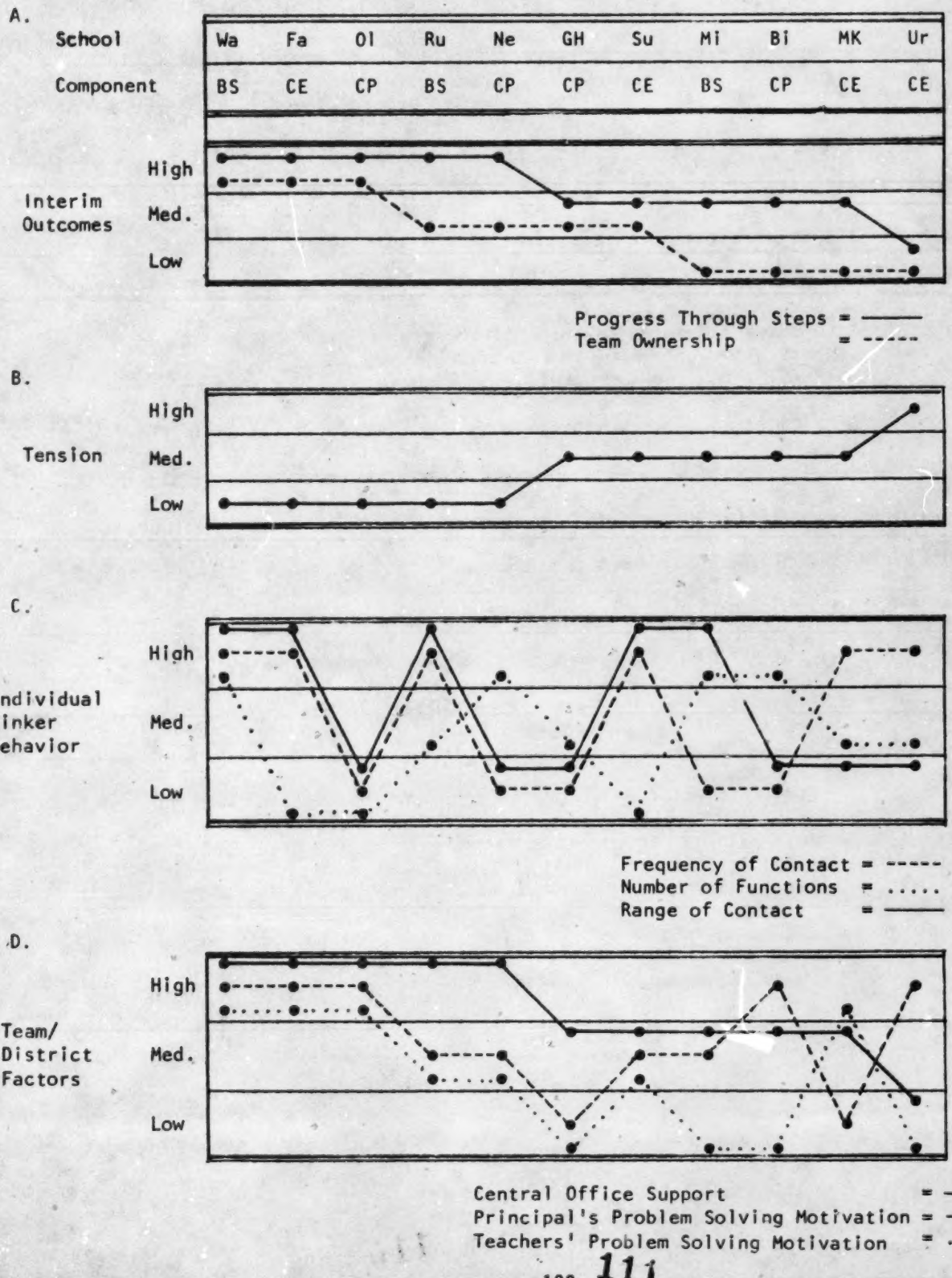
As a final step the relationships among the four sets of dimensions discussed above were examined: interim outcomes, RBS school relationship, linker behavior, and school context. This is accomplished through Figure 4. This figure highlights a number of important relationships among the dimensions. First, there was no systematic relationship between the component with which a team worked and the progress it made. Section 2A presents information on the interim outcomes for all schools, and shows how the schools were ordered in terms of those outcomes. The second row of the table indicates the component with which each team worked. Each component had one school that went through the steps well and that also developed a high sense of ownership. Two components had one school that did well technically but that did not develop a high level of commitment. Only one component had a school that did poorly technically and that also developed a low sense of commitment.

Second, where things went well, a number of factors combined to contribute to the successful outcomes. At Patriot, Oldtown, and Farmcenter, all the contextual factors and the component-team relationship worked in favor of the team. Support was high and tension was low. By contrast, everything worked against the Urban team except that the principal had a strong motivation to work with problems related to the component's curriculum area. This presentation suggested that the principal's motivation could not overcome a number of additional mitigating factors.

Finally, the linker variables did not operate like the others. The

Figure 4

COMPOSITE CROSS-SITE COMPARISON



interim outcome dimensions, tension, and the team-district factors all seemed to vary the same way. The linker variables followed a different pattern. Figure 4 suggests that linking behaviors were determined largely by component policies while the interim outcomes and degree of tension in the relationship seemed to be more closely related to school contextual factors.

Yet, the case history data suggested that this conclusion may be too simple. For instance, tension was reduced at Urban largely because the component staff were able to negotiate an agreement on activities that was satisfactory to school and district personnel. On the other hand, tension increased at Central when the linker began playing a more active role in meetings. These considerations suggested that team and district factors had a significant impact on the outcomes of planning, perhaps more significant than the kind of approach chosen. There were no obvious patterns as to which linking behaviors led to certain outcomes. Rather the linker seemed to be important as an agent who could adjust the component's approach to local conditions.

CHAPTER IV

CONCLUSION

In concluding this report, the findings are summarized, and some questions which were stimulated by the initial analyses are raised.

Initial Findings

While results must be viewed in the absence of implementation data, some initial conclusions have been reached with respect to the issue of combining rationality and cooperation, the nature of school-assistance agency cooperation, and the contributions of linkers and the schools to the change process.

Combining Rationality and Cooperation

RBS seeks to combine two frequently endorsed qualities for change efforts--rational planning and cooperative relationships--in its approaches for school improvement. The corporation's strategy is to develop process helping procedures geared towards resolving technical--as opposed to social psychological--issues. Separate approaches are being developed for each content area. The cross-site analysis does not indicate any major differences among the approaches in their ability to achieve outcomes related to rationality and cooperation. This similarity is not surprising. While those close to the three components emphasize the differences in their sets of steps developed and conceptions of cooperation, there is a strong similarity among the approaches.

Although the process-helping role was intended to be a way of combining an interest in rationality and in fostering cooperative relationships, examination of activities at the case history sites revealed a

tension between these two ideal characteristics. It was difficult to move through a set of steps for identifying discrepancies between goals and performance in a systematic manner while leaving considerable discretion with school people. There was a tendency to either emphasize moving expeditiously through the steps which reduced the team's sense of ownership or to play a low key leadership role which increased the time needed to complete the process and did little to alleviate confusion among team members. However, the cross-site analysis and the field data indicated a positive, reciprocal relationship between the two characteristics. The case at Union showed that mutual attainment of both was possible where the linker was able to maintain a balance between following the approaches and local control. Maintaining such a balance was facilitated where time and the team's understanding of the process were not problems.

Rethinking Cooperation

One of the most important conceptual developments in this report was the rethinking of the concept of cooperation. Insofar as past thinking has been based on research within formal organizations that examines the impact of participation on implementation, it has been seriously misleading. The intra-organizational setting is characterized by considerably more constraint than the relationship between two agencies. This constraint stems from the hierarchy of offices, formal authority, and organizational rules that characterize schools and other organizations. By constrast, each component was an independent organization (or organizational unit) that developed an agreement with another organization--a school--to engage

in a set of activities that were expected to be mutually beneficial. The school (or district) and the assistance agency were formal equals operating in some kind of market. Each had a number of options available to it and was relatively unconstrained in seeking those options. Moreover, each had a core of non-negotiable expectations for the relationship. If those expectations could not be met, the relationship was subject to termination by one side or the other.

The significance in the difference between the intra- and inter-organizational relationship is that participation as it is normally discussed is a way to overcome the dysfunctional impact of excessive control on both lower participants' sense of ownership and the upward flow of information. However, a cooperative orientation to an inter-organizational relationship is necessary to overcome the absence of control and the unpredictability that results. This unpredictability is characteristic of a market situation where goods and services are exchanged. The indications were that the components were in a weak bargaining position. Because of deadlines imposed by their funding agency, it seemed they needed the schools more than the schools needed them. Pushing and maintaining a cooperative relationship, then, was a way of "bringing in business."

These considerations help understand why tension was so important for the interim outcomes. Tension was an indicator that one or both parties were considering terminating the relationship. Moreover, while tension was present, team members withheld commitment, and work on the change process was slowed as greater attention was given to testing the

relationship in order to either reaffirm it or terminate it. Hence, it was not surprising that there was a strong relationship between tension and the outcomes. However, tension was not necessarily bad. It operated more as a warning sign. Where tension was successfully resolved, it contributed to component work by clarifying each party's understanding of the other's interests.

Linker Behavior

The cross-site analysis did not show any strong relationship between the measures of component linking activity and interim outcomes. Similarly, there were few indications that the individual linker's behavior had a major impact, even where the linker managed to broaden the range of site participants who became involved in the change process. However, this finding did not mean that the linker was unimportant. The case histories suggested that the linker played an important role, however much that role was constrained by component policy. The linker was the boundary spanner, the person mediating between the component and the school. As such the individual faced a wide range of contingencies and made a number of decisions (e.g., what functions to perform on site) that affected the component's ability to adjust to a team and stay in a school. More needs to be known about the situations a linker faces and how different decisions affect the component-school relationship in light of local conditions.

School Context

The school context had a greater impact on the interim outcomes than any characteristics of the approaches or the linkers' behavior. In the cross-site analysis, two variables were especially significant: the central office's support for the process and teachers' sense that there was a problem related to the component's program area. The principal's sense that a real problem existed also seemed to facilitate the change process. Taken together, these findings suggested that when all staff agreed to the importance of an effort, it was most likely to work. While agreement of all groups may not have been necessary, it was certainly useful.

The case histories identified a number of other factors that affected the outcome of the change process. First, a factionalized staff was more difficult to work with than one that was unified. The linking agent had to take pains not to become associated with any one group. Second, the districts had a number of standard operating procedures which limited the possibility of even forming a team. Third, in some schools, potential team members lacked familiarity with planning and program concepts or, as was the case with the students at City, the cognitive ability to quickly pick up the abstract concepts the components employed. While these schools may have been the ones that most needed the RBS approaches, problems in using those approaches were the most extreme in such schools. Finally, the change project did not exist in a vacuum. Other change projects at the sites not only reinforced the effort but also competed for scarce resources, including staff time. In some instances, these projects also created a climate of

cynicism and distrust that affected acceptance of the components' approaches. These were all factors to which linking agents had to adjust when working with a school.

Generally, initial field work underlined the importance of the overall impact of the school context on the change process. The context helped to explain why the same approach went over much better in one setting than in another.

Future Questions

Initial field work and report writing have generated a number of questions that Field Studies hopes to address in the coming years or that should be the topic for additional research. Some of the most important are listed below.

1. How do team members perceive the approaches and the work of component staff?

Initial observations yielded relatively limited information on what team members were really thinking and how they saw the approaches. Periodic interviewing of team members in the coming months should help to fill that gap.

2. What do other relevant actors know about planning activities?

Initial observations were limited primarily to the team. However, the plans generated by the component approaches will have to be implemented by school staff and, in some cases, members of the community. It will be important to know what information they have about planning team activities, what they believe is happening, and what input--if any--they

have had to the team's deliberations. Already the field notes point out that there is considerable discussion of the team and its work in some schools; however, the data are not yet available which would reveal the significance of that communication for later change activities.

3. How does one handle the tension between participation and a codified approach?

One theme running through this report has been the tension between the attempt to maximize participation in the planning process and the effort to follow a predetermined set of steps for planning. No attempt has been made to place a value judgement on this tension. However, further analysis should identify the conditions under which it is healthy and where it is detrimental to planning work. At the same time both how a linker attempts to balance adherence to an external agency's procedures for change and local control and how tension is resolved should be investigated.

4. What is the impact of entry on later activities?

It has been suggested that the process of selecting sites consists of negotiating an agreement for the exchange of services. Those agreements had important consequences for later use of the component approaches. More research is needed, however, to identify how the dynamics of the negotiations and the nature of the agreement reached--e.g., its formality and what is left unstated--affect change processes. While there will be no further opportunities to observe the entry process in this study, the development of relationships in the schools will be followed, and there will be opportunities in other research to discuss with linking agents how they go about building new ties with schools and districts.

5. What school factors affect the use of the components' approaches?

A number of school conditions that have important impacts on the change process have tentatively been identified. Continuing research will provide more information on the importance of these factors and will also identify additional important school characteristics.

6. What linker behaviors are effective under which conditions?

Initial analysis suggests that the linker is the crucial mediator between the school and the component. Although no linker behaviors that were effective across all sites were discovered, it would be useful to pursue this kind of analysis to identify if there are specific tactics that are consistently useful in particular kinds of schools or for dealing with repeated problems of a specific sort.

7. What processes mediate between the school and component?

Here again, initial analysis has just scratched the surface. It raises a number of important questions to pursue including: Why should planning with a number of people for the use of an approach facilitate progress through the steps or a sense of ownership? How is tension between change agent and school useful and how is it resolved? Does an exchange take place between school and component? If so, what are its terms, how is it assessed by different parties, and what mechanisms are available to ensure that all parties remain satisfied?

8. What are the working conditions of potential users of the component approaches, and how will those conditions affect the use of the approaches?

As mentioned above, RBS does not intend to employ these approaches in schools after the initial development work. Instead, the expectation

is that they will be disseminated to other technical assistance agencies throughout the tri-state region, and most especially to intermediate service agencies. These agencies should be able to use the approaches in their ongoing assistance work with schools.

This strategy raises a number of questions about the conditions under which the linking agents in ISAs--the true users of these approaches--operate. For instance, it is important to know how much time linking agents devote to field work and what their school case loads are. Unless they can commit considerable time to work with a few schools, they may not be able to use the approaches. Other questions include:

- What expertise do these agents have with content relevant to the program areas?
- What knowledge do they have with planning technologies like goal setting and measurement?
- What technical backup is available within the ISAs when the agents face problems that they cannot solve alone?
- What are their pre-existing relations with schools? Will those relations facilitate the attempt to use the approaches or act as a barrier?
- How are the agents evaluated? Will they be rewarded or punished for the use of these approaches?

In December, 1979, Field Studies will initiate a study of ISAs in the tri-state region in order to obtain preliminary answers to these questions.

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APPENDIX A

SCHOOL DEMOGRAPHIC DATA

	BASIC SKILLS					CITIZEN EDUCATION				CAREER PREPARATION			
			Rural District										
	Patriot	Middleburg	Smalltown Middle	Southend	Smalltown Elementary	Urban	Farm Center	Riverside	Suburb	Green Hills	Neighbortown	Bigtown	Oldtown
Grade Levels	K-4	K-6	6-8	K-4	1-6	7-9	7-9	6-8	7-9	6-9	9-12	9-12	9-12
Total Enrollment	390	677	575	375	628	1485	676	921	830	726	799	2654	3146
Percent of Minority Students	95%	11%	20.5%	20%	32.5%	61%	19%	96%	2%	8%	0%	92%	55%
Percent of Students 1 Year Behind in Reading[a]	75%	35%	25%	21%	17%	70%	75%	90%	20%	5-10%	20%	46%	60%
Percent of New Students (Transfers In)	15%	9%	10%	5%	16%	13%	18%	10%	11%	7%	2%	4%	13%
Total No. of Full-Time Staff	27	38	42	20	43	101	53	79	58	51	58	182	172
No. of Classroom Teachers[c]	18	31	38	13	35	77	43	63	49	45	49	150	141
No. of Aides & Para-Professionals[c]	3	4	0	6	6	17	6	10	2	0	3	12	8
Percent of Professional Staff on Discretionary Funds[c]	11%	0%	13%	15%	0%	15%	1%	1%	4%	0%	1%	6%	3%
Percent of Aides/Para-Professionals on Discretionary Funds[c]	0%	0%	(NA)	33%	100%	7%	17%	100%	100%	0%	100%	25%	8%
Percent of Teachers in the First Year in School	4%	16%	19%	10%	12%	13%	6%	3%	9%	4%	5%	1%	6%
Percent of Staff with MA.[b]	29%	63%	30%	0%	5%	52%	19%	13%	22%	29%	38%	32%	37%
Geographic Location	SMALL CITY	SUB	RURAL	RURAL	RURAL	BIG CITY	SMALL CITY	BIG CITY	SUB	SUB	RURAL	SMALL	SMALL CITY
Total District Enrollment	4858	10881		2437		230,000+	10985	20428	1605	4549	2800	8586	8213
Percent of Decline in Enrollment[a] (1975-1978) (to nearest 5%)	20%	30%		0%		15%	10%	5%	0%	20%	0%	5%	5%

[a]Based on Principal Estimates

[b]Based on Full-Time Staff

[c]Full-Time Equivalents. Part-Time Staff are treated as half-time.

APPENDIX B

A COMPARISON OF TEAM COMPOSITION ACROSS SITES

School	Central Office	School Staff: Principal/ Asst Principal	School Staff: Supvs., Counselors, Specialty Teachers	School Staff: Classroom Teachers	Students	Community: Dual-Role (ie, Aides)	Community: Parents, Business, Etc.	Other	TOTAL
Patriot	1	1	0	4	0	0	0	0	6
Middleburg	1	1	1	8	0	0	0	0	11
Rural[a]	2	3	1	12	0	0	0	0	18
Urban[b]	0	2	0	4	0[c]	1	0[d]	1[e]	8
Farmcenter	1	2	1	4	3	1	2	1	15
Riverside[f]	0	0	4	2	15	3	2	0	26
Suburb	0	1	1	3	3	0	3	0	11
Green Hills	1	1	1	4	0	1	0	0	8
Neighbortown	1	1	1	2	1	0	1	0	7
Bigtown[g]	1	1	1	2	1	0	1	0	7
Oldtown	3	2	1	2	0	0	1	0	9

[a] The data presented for this site represents collectively the three separate schools who participated jointly in the RBS project. Each school's "team" consisted of either the principal or asst. principal and 4 teachers. These "teams" did function as smaller work groups at joint meetings, but met as separate units only once or twice over the course of the year. The team unit at this site is thus considered to be the composite of members of individual school teams, who regularly met together and were joined at these meetings by central office personnel.

[b]The team at this site was never clearly formulated. Attendance and team composition varied considerably from meeting to meeting, and detailed, reliable records of attendance are available for only five of the seven meetings attended by Field Studies observers. The data presented reflect modal attendance by various groups across those five meetings. It should be noted, for example, that an estimated nine different teachers attended meetings at various times over the course of the year.

[c]Students were invited to attend the last two team meetings of the year. Seven attended one meeting, and five the other.

[d]Parents were invited to attend the last team meeting; 5 attended.

[e]A student from a local college.

[f]Team attendance at this site is large and highly variable (ranging from 13-35), with no clearly formulated or stable "team." Data presented are modal attendance of various groups across meetings.

[g]At this site a working "core" group was identified from a larger team, which was to review and approve its work. Because this larger team never met again, the data presented are for the smaller group, who actually became the school team.